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Delhi Dist.
1883-4

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GAZETTEER

OF THE

DELHI DISTRICT.

1883-4.

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PUNJAB GOVERNMENT.

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PREFACE.

THE period fixed by the Punjab Government for the compilation of the *Gazetteer* of the Province being limited to twelve months, the Editor has not been able to prepare any original matter for the present work ; and his duties have been confined to throwing the already existing material into shape, supplementing it as far as possible by contributions obtained from district officers, passing the draft through the press, circulating it for revision, altering it in accordance with the corrections and suggestions of revising officers, and printing and issuing the final edition.

The material available in print for the *Gazetteer* of this district consisted of the Settlement Reports, and a draft *Gazetteer*, compiled between 1870 and 1874 by Mr. F. Cunningham, Barrister-at-Law. Notes on certain points have been supplied by district officers ; while the report on the Census of 1881 has been utilised. Of the present volume, Section A of Chap. V (General Administration), and the whole of Chap. VI (Towns) have been for the most part supplied by the Deputy Commissioner ; Section A of Chap. III (Statistics of Population) has been taken from the Census Report ; Mr. Carr Stephen's work has been largely drawn upon for the Archæology of Delhi and its suburbs ; while here and there passages have been extracted from Mr. Cunningham's compilation already referred to. But, with these exceptions, the great mass of the text has been taken almost if not quite verbally from Mr. Maconachie's Settlement Report of the district.

The draft edition of this *Gazetteer* has been revised by Messrs. T. W. Smyth, G. Smyth, Maconachie, Carr Stephen, Parker, and Delmerick, and by the Irrigation Department so far as regards the canals of the district. The Deputy Commissioner is responsible for the spelling of vernacular names, which has been fixed throughout by him in accordance with the prescribed system of transliteration.

THE EDITOR.

CONTENTS.

CHAPTER I.—THE DISTRICT.

Section A.—Descriptive—

Page.

Section B.—Geology, Fauna and Flora—

CHAPTER II.—HISTORY.

CHAPTER III.—THE PEOPLE.

Section A.—Statistical—

Section B.—Social Life—

CHAPTER IV.—PRODUCTION AND DISTRIBUTION.

Section A.—Agriculture and Live-Stock—

Section B.—Occupations, Industries & Commerce—

Section C.—Prices, Weights and Measures, and Communications—

CHAPTER V.—ADMINISTRATION AND FINANCE.

Section A.—General and Military—

Section B.—Land and Land Revenue—

CHAPTER VI.—TOWNS, MUNICIPALITIES AND CANTONMENTS.

Table No. 1 Showing LEADING STATISTICS.

1	2	3	4	5
		DETAIL OF TAHSILS.		
DETAILS.	DISTRICT.	Delhi.	Sunipat.	Ballabgarh.
Total square miles (1881)	1,276	434	454	388
Cultivated square miles (1878)	821	Not available.	Not availble.	Not available.
Culturable square miles (1878)	225	Do.	Do.	Do.
Irrigated square miles (1878)	275	Do.	Do.	Do.
Average square miles under crops (1877 to 1881)	844	Do.	Do.	Do.
Annual rainfall in inches (1866 to 1882)	29·0	29·0	24·0	24·5
No. of inhabited towns and villages (1881)	701	241	223	237
Total population (1881)	643,515	317,802	186,835	138,878
Rural population (1881)	439,798	140,410	173,758	125,630
Urban population (1881)	203,717	177,392	13,077	13,248
Total population per square mile (1881)	504	732	411	358
Rural population per square mile (1881)	345	323	383	324
Hindus (1881)	483,332	220,352	154,689	108,291
Sikhs (1881)	970	892	47	31
Jains (1881)	7,336	3,545	3,546	245
Musalmans (1881)	149,830	91,105	28,548	30,177
Average annual Land Revenue (1877 to 1881) *	876,544	295,536	377,170	203,838
Average annual gross revenue (1877 to 1881) †	1,180,414	..	...	...

* Fixed, fluctuating, and Miscellaneous. † Land, Tribute, Local Rates, Excise, and Stamps.

DELHI.

CHAPTER I.

THE DISTRICT.

SECTION A.—DESCRIPTIVE.

Chapter I, A.

Descriptive.

General description.

The Delhi district, is the central of the three districts of the Delhi division, and lies between north latitude 28° 12′ and 29° 13′, and east longitude 76° 51′ and 77° 35′. It consists of a long narrow strip of country running along the right bank of the Jamná. Its greatest length north and south is 76 miles; its average breadth is 18 miles, the broadest place being opposite the city of Delhi, where it measures nearly 26 miles. It is bounded on the north by the Pánipat *tahsíl* of the Karnál district; on the east by the river Jamná, which separates it from the Mirath and Bulandshahr districts of the North-West Provinces; on the south by the Palwal *tahsíl* of the Gurgáon district; and on the west by the Sámplah, Gohánah, and Jhajjar *tahsíls* of Rohtak and the Sadr *tahsíl* of Gurgáon. It is divided into three *tahsíls*, of which that of Ballabgarh lies to the south, that of Delhi in the centre, and that of Sunípat to the north.

Some leading statistics regarding the district, and the several *tahsíls* into which it is divided, are given in Table No. I on the opposite page. The district contains two towns of more than 10,000 souls, namely :—

Delhi	173,393
Sunípat	13,077

The administrative head-quarters are at Delhi, which is situated about the centre of the eastern border of the district, on the right bank of the Jamná, and on the Sindh, Panjáb and Delhi Railway. Delhi stands 31st in order of area and 12th in order of population among the 32 districts of the province, comprising 1·01 per cent. of the total area, 3·41 per cent. of the total population, and 8·35 per cent. of the urban population of British territory.

Town.	N. Latitude	E. Longitude.	Feet above sea-level.
Delhi	28° 39′	77° 17′	707
Sunípat	28° 59′	77° 4′	720*
Ballabgarh	28° 20′	77° 22′	700*

The latitude, longitude, and height in feet above the sea of the principal places in the district are shown in the margin.

The hills and the river.

The tract thus limited, though exhibiting none of the beauties of mountainous districts, possesses a considerable diversity of physical feature, and in parts is not wanting in picturesqueness. This it owes

* Approximate.

Chapter I, A.
Descriptive.
The hills and the river.

to the hills and to the river. The former, which at the southern end join on to the hills of Mewát and so meet with the Aravalís, at the other start from the river at Wazírábád, four miles north of Delhi, and skirting the present city on the north-west and west, stretch away nearly due south to Mahraulí. Before reaching this place, however, they branch out into two halves, one going full south, the other sweeping round in a curve to the south-east to Arangpur, whence again it turns south-west, and uniting with the other branch below Bhátí, holds on southward to Kot, and so out of the district into Gurgáon. But though the main direction may thus be described, there are here and there irregularly shaped spurs which break the continuity of the range, and at the same time greatly extend its area. The irregular oval enclosed by the branching halves above spoken of is really a plateau of a light, sandy soil, lying high and dry, but with a very useful general slope to the south-east. Here in different places are earth work dams aggregating several miles in length, made to catch the drainage. Of these more will be said further on.

The hills of Delhi, though not attractive in themselves, give a pleasant view across the Jamná, and in clear weather allow, it is said, even a glimpse of the Himálayas. Their surface is generally bare, supporting little or no vegetation save a stunted *kíkar* (*Acacia Arabica*), or *karíl* (*Capparis aphylla*), or the small bush of the *bérí* (*Zizyphus nummularia*) which, with its prickly thorn, is so inhospitable to the foot traveller. The surface of the ground is sprinkled with thin laminæ of mica, which shine in the sunlight like gold. The stone, which juts up from the ground here and there, is hard and often sharp-edged. Water of course lies very deep, and irrigation by well almost everywhere impracticable. A moderate pasture is obtained by flocks of sheep and goats herded by Gújar boys. This tribe has appropriated almost entirely the hill villages, as they suit their pastoral traditions, and pastoral traditions are less repugnant than a settled husbandry to thieving, a habit universally attributed to the Gújar. The highest point of the range probably is near Bháti—1,045 feet above the sea and 360* above the Jamná railway bridge at Delhi. The breadth varies greatly. At Arangpur it is not less than ten miles, while towards the northern end the hills dwindle into a mere rocky ridge, only a few yards broad. That 'Ridge,' however, since the memorable hot weather of 1857, is a name not likely to be forgotten by Englishmen. The hills divide the district into two parts. The northern, which is the larger, is also the more fertile and more populous. Without going minutely into details, it may be said that this larger half of the district consists of three parts, the Khádar or riverain of the Jamná, the Bángar or level mainland, and the Dábar or lowland subject to floods. The Khádar lies rather low, has a light sandy soil, and easy irrigation from wells.

The Khádar and Bángar.

The Bángar is higher, and by nature, drier. The Western Jamná Canal, however, traverses its whole length and affords too copious

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* Making the bridge itself 685 feet above the level of the sea. The highest recorded flood of the river at this point was 673·7 feet. The sun-dial in the Fort at Delhi gives 825 feet, but this is somewhat too high.

Chapter I, A.

Descriptive.

The Khádar and Bángar.

irrigation, which has produced a sad effect on the appearance of the country. The most casual observation during a ride across the Bángar would show hundreds of acres whitened or half whitened by the destructive *reh* or *shor*. The soil is naturally more fertile and productive than that of the Khádar, being of a firmer consistency. The country is cut up in every direction by water-courses. Nearly on the boundary of the Khádar and the Bángar the Great Trunk Road runs almost due north up to the end of the district.

The Dábar.

The Dábar lies to the west of the hills, and consists of the low ground or basin scooped out by their westward drainage, and the floods of the Sáhibi *naddí*, which comes down through Gurgáon from Alwar. In the rainy season the country is under water for many miles round Chháolah and the villages near it: as the rains subside and the cold weather comes on, the greater part of the floods is carried off into the Jamná by the Najafgarh *jhíl* escape, but the *jhil* itself, except in years of drought, covers a great many acres with the residuum, which lies in a hollow south of the villages of Báhlolpur, Dahrí, and Zainpur.

The Jamná.

If, as seems probable, the drainage of the hills hollowed out the Najafgarh *jhíl*, so too the division of the Khádar and Bángar was doubtless caused by the erratic wandering of the Jamná from its ancient bed. The river enters the district at a height of some 710 feet, and leaves it at about 630 feet above the level of the sea, with a course within the Delhi limits of rather over 90 miles, and an average fall of between 10 and 11 inches to the mile. The general direction is nearly due south. In the floods of the rainy season the river has a considerable breadth, swelling in places to several miles, with a maximum depth of some 25 feet. In the cold weather its normal depth is said to be four feet only; the stream is only sufficient to supply the three canals which draw from it (the Eastern and the Western Jamná, and the Agra Canal) and is then fordable in many places. The banks of the river are generally low, and the bed sandy, but there is said to be "a bed of firm rock" under the site of the Agra Canal weir at Okhlah. Religious reverence is due to the Jamná from the Hindú, though in a less degree than to the Ganges. It passes close under the Fort at Delhi, and it must always have rounded the eastern point of the rocky 'Ridge' at Wazírábád. But in the northern part of the district it appears formerly to have had a course much to the west of that which it holds at present. The drainage channel, called the Budhi *nalá*, which comes down under the very doors of Sunípat, would seem by the conformation of the country to have been the old bed of the Jamná, and this is supported by strong and general tradition. The course of the Budhi marks off the division of the country into Khádar and Bángar. The Khádar which, as might be supposed, lies low, may be defined as the soil which at some time or other lay either under the river or to the east of it.* The Bángar in old times lay immediately to the west of the

* An interesting evidence of this is the elongated slip-like shapes of most of the eastern Bángar villages. They evidently abutted on the river, and part of their areas is made up of the Khádar land deserted by it. But east of this again the land is slightly higher, also favouring the theory of a sudden change to the east.

Chapter I, A.

Descriptive.

The Jamná.

stream, and the ascent of the old bank is in most places plainly visible. How or when the river changed its course is not known; but there seems some probability that the change was violent rather than a gradual one. The physical conformation above alluded to favours this; while some countenance is also given to it by the fact that the shapes of the village areas in the Khádar do not at all suggest a gradually elongating boundary, as would probably be the case had the river gradually receded. Nor is the latter supposition rendered likely by the circumstances, so far as known, of the origin of those villages. It may at any rate be considered certain that the river once flowed beneath the walls of Sunípat, and down south by Narelah, to somewhere near Azádpur on the Grand Trunk Road near Delhi, where, beginning to feel the influence of the hills, it must have turned sharply to the east. Below Delhi its course seems to have been in the same way immediately east of the Bángar bank. This, in the immediate vicinity of the city, abuts almost directly on the stream where it now runs; the soil is hard, high, and in many places rocky. The Khádar, after reappearing in the fertile lowlands of Indarpat and Ghayáspur, is again cut off at Okhlah, where the Bángar bank juts boldly forward, giving an advantageous site for the head of the Agra Canal. For some few miles below this the ground continues the same, but then the old river would seem to have taken again a more westerly course than the present—to have passed close by the ancient village of Tilpat: then turning again south-east along a *nalá* still visible, to have rounded closely the high bank on which the Khádar-Bángar villages in this part mostly stand. From Gharorah to Chánsah this line is very conspicuous. The Khádar south of Delhi is thus a very narrow slip of country, often only a single village in breadth.

South division of the District.

The country immediately south of Delhi as far as Mahrauli, Toghlakábád, and Molarband, is rocky and undulating. This and the picturesque ruins abounding almost everywhere give the scene an interest not often found in the plains of India. Beyond this again to the south, the country lying between the hills to the west and the Khádar already described on the east becomes more flat and open, and so fit for the passage down the eastern side of its length of the Agra Canal, which keeps an almost perfectly straight course at a low level down into the Palwal *tahsíl.* Parallel with it, roughly speaking, is the metalled road to Agra which passes through Ballabgarh, at a distance of 22 miles from Delhi. The soil of this part is mostly a light, sandy loam, which, under good hands, is very fairly productive. The country between the Agra Road and the hills to the west begins to get level a few miles below Badarpur; it is mostly sandy, bearing the detritus from the hill slopes, and in the rainy months is marshy and in places flooded—the passage of the water is toward the south, where it debouches at the top of the Palwal *tahsíl.*

Southern drainage lines.

The drainage of the Delhi district, as may be easily seen from the map, is divided completely by the hills, and may be separately considered in these two portions. The drainage of the southern part is simple. There are three main outlets for the north Ballabgarh drainage, in its rush down eastward from the hills to the river—the

Chapter I, A.

Descriptive.

Southern drainage lines.

Bárahpulah, Tekhand, and Burhiyá *naddís*. The general flow of these water-courses, which is too violent in flood to be of much use in irrigation, is to the east; but here and there, owing to local peculiarities of soil, their course is changed, and they go sometimes east, sometimes south. The Bárahpulah drains the slopes of the hilly villages north-east of Mahrauli, and crossing the Agra Road under a fine bridge (from the number of arches of which it takes its name), runs into the Khádar just south of Humáyún's tomb. The Tekhand *naddí* drains the lands west of Máhraulí, crosses the road about four miles below the Bárahpulah, runs over the canal by a super-passage 2½ miles below Okhlah, and then runs southward into the river. The Burhiyá *naddí* drains the whole of the hills lying in the vicinity of Arangpur to its south-west and south. It is larger than the Tekhand *nalá*, and in flood it is sometimes violent enough to stop the passage of travellers at the point where it crosses the Mathrah Road, which is unbridged. The south Ballabgarh drainage runs more decisively south-east. The torrents and drainage channels on this part beginning from the north are as follows:—

(1.) There is a small channel issuing from the hills, south of the village Meolah Mahárájpur, which comes down on to the low ground of Fatehpur Chandilah.

(2.) A much larger stream, called the Parsaun, comes down from the Badhkhal hill on the same low ground in Fatehpur Chandilah, a little to the south of the other. It crosses the Agra Road under a bridge, and fills the tank at Farídábád. Thenceforward it divides; one branch of the watercourse goes down the old imperial road toward the Majesar lands, and then turns eastward on to Sihi. The second goes more directly to Sihi, passing by the *ábádí* of that village, and so on near Súrat Ram's garden to Ballabgarh. Thence it crosses the main road again on to the low ground of Ranherah. Before the Agra Canal was dug, the water used to spread over the fields of Majheri and Chandaoli.

(3.) A third channel descends from the hills south of Badhkhal through the Daulatábád land, and round to the south through Ajraunda into the limits of Majesar village. There it splits up into two streams; the main one, passing between the two *ábádís* of Majesar, passes through the west lands of Ballabgarh on to Ranherah *jhíl;* the other passes north of Majesar into Sáran; some water too from this *nalá* comes down on the south lands of Daulatábád, through Minárú to Sáran, and meets the last named stream in the *dahar* of Gaunchhí village.

(4.) Another stream comes down from the hills on the confines of Bhánkrí and Pálí on to the Dabuá lowlands, then through Gházípur and Naglah Gújarán, touching the south-west corner of Sáran, and falls into Gaunchhí *dahar*. When in heavy flood it does not stop there, but passes on to Shamápur.

(5.) There is a stream locally known as Bhandwánbáj which comes down south of the last named on to Kherí Gújar.

(6.) The sixth torrent comes out of the Pálí hill. Passing by the south of the *ábádí* of that village, it goes to Kherí like the other.

Chapter I, A.
Descriptive.
Southern drainage lines.

(7.) Another *nalá* comes down from the hills near Kothrah Muhabatábád. It passes to the north of Pákal, and touches the north of the Nekpur lands joining with Nos. 5 and 6 in Kherí Gújarán. Thence running on through the south-west corner, of Naglah, and the north of Koreishípur, it goes through Sarúrpur and Mádalpur, and joins No. 3 and 4 in Shamápur. Thence, moistening the lands of Jhársetlí, Kandháolí, and Kailgáon, it passes through Naglah, Jogián, Harphalah, Maholah and Kabúlpur Bángar out of the district.

(8.) This *nalá* comes out of the hills under Mángar; it is injuriously violent, and when in flood brings down a large body of water. Its line lies close by Dhauj, Tíkrí Kalán, Fírozpur Kalán, Ladhiapur into the *jhíl* of Kabúlpur Bángar.

(9.) The last *naddí* is the one issuing from under Kot. This is nearly as bad as Mángar *nalá* when in flood, and damages the lands of the villages through which it flows when it comes down in heavy rains; it passes through Alampur, Sarohi, Khoi-Jamálpur, Bijupur into the marsh at Sarmatla in Palwal and thence on to the *jhíl* of Khalílpur.

Of all of these the most violent are No. 8, the Mángar one, No. 3 from Badhkhal and No. 9 from Kot in the order named. There is no perennial stream, however; and except in the rainy season the effects are seen only in the undulating character of the ground, here and there cut into more clearly marked channels, the permanent moisture of the lower lands, and in a few villages, a pool of standing water which, though in dry seasons it disappears altogether, in wet ones swells into a *jhíl* or marsh of considerable size. Thus in the cold weather the road is sometimes unpleasantly flooded between Sarmatla on the border of Palwal, and Ballabgarh; and duck can be generally shot on the ponds near Gaunchhí throughout the winter months. As instanced above, the Agra Canal has materially altered the drainage of the east half of the Ballabgarh *tahsíl*. There is now no room for any considerable length of drainage flow on that side. There is an escape dug from the canal south of Tilpat opposite the place where the water of the Burhiyá *naddí* comes in, and this meanders on in a slimy *shor*-mixed stream through the low Khádar north of Bhopáni on toward Bhaskaula, where it gets a doubtful exit into the river. The want of drainage here is shown in the prevalence of *shor*, which more or less affects all the land lying in this neighbourhood.

Drainage north of the hills.

Turning to the drainage north of the hills, and beginning at the further end of the district, the first drainage line that draws notice is the channel of the Budhi *nalá* mentioned above, which runs down almost due south, on the east side of the Bángar *chak*. This comes down to within a few miles of Delhi, but in the latter part of its course it becomes very serpentine, and hence is called there the Nág *nalá*. It has no clear outlet, but is partly intercepted by the Gangá Toli escape, dug from the canal 13 miles above Delhi. The large sheet of water near Bhalswah Jahángírpur marks the continuation of this channel, which sooner or later it is hoped will be cleared out again. There are outlets for the drainage from the west dug *into* this channel near Jagdíspur and Ládpur below Sunípat; but no outlet exists for the water when it comes there, except a very

Drainage north of the hills.

irregular passage down by Pitampura, which does not do its work at all properly. Besides this *nalá* the Khádar has a depression, well defined in some parts, blocked up by cultivation in others, running down from Kherí Tagá, with a fork on one side through Pipli Kherá, and another through Rámnagar. Between Dhatúri and Malikpur the channel is well defined, but in Murthal it grows doubtful, appearing again in a perfect net-work of hollows and sinuous depressions in Kunashpur, Dipálpur, and Kheorah. Hence it takes a turn rather more south-east, and joins a *nalá* of the river at Jakhauli. From the large pond in Pipli Kherá, a small trench (it can hardly be called a ditch) has been dug for a considerable distance to the south-east to carry off the rain water, but it has not been vigorously followed up or kept in repair, and so is of little practical use. It may be asked what is the need of drainage channels in the Khádar, where the water-supply is never too abundant; but this remark supposes a greater power of absorption in the soil than actually exists. As a matter of fact the Khádar does need drainage, though in comparison with the Bángar not so much. There are not a few places in the Khádar where *reh* or *shor* is apparent, especially under the lee of the Grand Trunk Road. This work forms in some places a *band* several feet above the level of the adjacent country, and necessarily impedes the passage of the rain drainage toward the river. It is true there are scientific bridges at different places, but the breadth of water-way was, it would seem, intended to be enough to protect the road, rather than specially to allow free unimpeded passage of the drainage.

Drainage of the canal tract.

But the damage done in this way by the Grand Trunk Road is a mere trifle, compared with the grievous injury that has been for many years going on in the Bángar, by reason of the bad alignment of the Western Jamná Canal, and want of proper provision for drainage of the rain water and surplus moisture from irrigation.

The alignment of the canal, as it has stood for some fifty years since its reconstruction, is throughout a great part of its course in this district in a *valley;* and in order to allow of irrigation on the higher grounds receding from its side, its bed has been raised so as to be not seldom higher than the adjacent fields. Percolation has been of course immense. Then the distributaries have hitherto been constructed on the same principle, without any thought of economy of land or water. The water-courses often intersect each other and often run parallel side by side for long distances. It is not wonderful therefore that the damage done by water-logging is immense, and in places all but irretrievable. With the best system of drainage possible, and the best care and attention in watching over and enforcing that system, it will be a long time before the Bángar recovers itself. One branch of the drainage of the Delhi Bángar runs down to the west of Bali Kutabpur, then south south-west to Pugthallah on through the two Bajánás, and so into Rohtak to meet with the other lines at the Najafgarh *jhil.* Another depression systematised into a drainage cut starts from Júán, and goes south south-west by Salemsar Májra and Mahipur, and so like the other out of the district. A third runs due south from Bhatgáon through Nirthán; a fourth *crosses* the line of the Canal at Bhadanah

Chapter I, A.

Descriptive.

Drainage of the canal tract.

and Jharauti with, as may be imagined, a terrible effect; while a fifth, a very important line, runs due south from the two Thánahs by Nizámpur Khurd, Kutabgarh, and passes between the two large villages Ládpur and Kanjháolah with a course to the south-west into Rohtak. A sixth lies south-east of Púth Khurd and goes through Sáhibábád, Daulatpur, Rithálah (a large part of whose lands is simply marsh) and Magholpur Khurd, crossing the Rohtak road about a mile east of Nángloi Jat, and falling into the Najafgarh *jhíl* in the limits of Nángloi Saiyad. These drainage lines are not mere depressions scientifically determined to be such: they are patent to an ordinary observer riding over the ground if he carefully watches the lie of the land, and two things that always are affected by this, the character of the cultivation and condition of the soil. Except the last line the lower part of the channels lies in Rohtak, where they come in at the top of the Najafgarh *jhil.*

On the other side of the canal the directions of the drainage flow are perhaps not so clear, but still they may for the most part be made out. One small line goes down between Ahulánah and Atael; another larger one runs south-east from Khúbru through Shekhpurah and Aghwánpur; a third from Dabarpur in the same direction through Máhrá in the Khádar below Shahzádpur. The outlet of these three is clear, or might be made so, into the Budhi *nalá* mentioned above. But below this there is more difficulty. There is a flow south-east from Júán, but it gets obstructed somewhere about the road where it passes through Barwásni, and but little water passes on to Mailanah, though that seems the natural direction. About Rohat there is almost a basin, and the escape dug nearly due east to Nasírpur Bángar at present does but little good. It appears to be used to take off superfluous canal water rather than for relieving the neighbourhood by drainage. Further down there is a sinuous depression below Katlupur, passing through the north-east lands of Bowánah round by Sanauth into the Gangah Toli escape. This escape was dug possibly to take off the surplus water of the canal, and not for drainage purposes, though its direction is shaped so as partly to serve them. It carries off some water from Sanauth and Razápur Kalán, and then running sharp to the south turns again to the east at the Grand Trunk Road, which it crosses a mile south of Alipur, and thence on in the same direction to Garhí Khusru and the *nalá* running past Burári.

The Najafgarh *jhíl.*

The western lines, as has been already said, converge on the *jhíl* below Najafgarh. There are two main passages into this: one to the north of Jharaudah and east of Dicháon comes into the lowlands at Nawádah Hashtsal; the other and larger body of drainage comes in between Mandelah Khurd and Bákargarh, running south-east to Pindwála Kalán, and meeting the large *jhíl* below Chháolah. The main *jhíl* lies to the south-west and west of this, and is fed, as already noted, by the Sáhibi drainage from Gurgáon and the flow of hill water on the west side of the Delhi hills. This last comes down in several places; the most distinct lines perhaps are those lying about Dábri and Pálam.

A more particular account of the Najafgarh *jhíl* considered in its revenue and irrigation aspects will be found in Mr. Maconachie's Settlement Report. It is sufficient to note here that the ar

drained by it is estimated at 3,072 square miles, and its water surface with a depth of 12 feet in the water gauge at Nának Heri is 56,657 acres or about 88½ square miles.* In 1833 its area was estimated at 52½ square miles, but the time of the year this refers to does not appear. Its outlet is a drain passing with a muddy sluggish flow to the north-east by Kakraula, Nilauthi, and Basei across the Rohtak road about three miles west of Delhi, and emptying itself into the Jamná just above the village of Wazírábád.

The Western Jamná Canal.

The Western Jamná Canal has for many years been a factor of enormous power in determining the condition of the *zamíndár* in a large and densely populated portion of the district. It appears that the Dehli Canal is a work of considerable antiquity, certainly some centuries old; and the tradition of the country-side says that after copious and long continued irrigation, the Bángar *chak* of the district became ruined with *reh*, that the canal was given up, and people took to wells, or to dependence on the rainfall to nourish their crops. About the year 1815 the canal water was re-introduced. In an official document of the time it was noted that several persons were ready to contract to do the excavation and clearing work necessary for this purpose, but a "work so dignified, so popular, and so beneficial, should not fall to the share of any but the Government." It was estimated that one lakh yearly for three years would cover the expenses of the scheme, the result of which it was hoped would be to bring under cultivation "vast tracts now deserted." Lieutenant Blaine, the officer in charge of the work, was called away to the field by the Goorkha war; but operations must have been pushed on without great delay, for in 1819 the canal was running. After this no information is available before 1838, when a systematic clearance was made, and once again before the Mutiny. At the Regular Settlement in 1842 little damage from water-logging seems to have been noticed or even apprehended. But in 1856, remissions for *shor* began, and others were made in 1858, and since then the subject has been one of constant anxiety to all officers acquainted with the state of the case. Moderate irrigation and good drainage are all that are wanted to restore the Bángar of Delhi to the beautiful fertility described by John Lawrence about forty years ago, as allowing one "to ride for miles as through a highly cultivated garden." But every year's delay in bringing these measures into operation makes the remedy hoped for more difficult.

Reh.

The existence of the evil of *reh* and its extensive impoverishment of the soil are too well known now to require to be dwelt on at length.† It is really impossible to tell in places how far the damage has spread. Here and there ruin unmistakeable, bare and perhaps complete, is apparent. Whole tracts of land, formerly most productive, are lying barren; white with the saline efflorescence when dry, or when wet, foul with a stagnant and sickening vapour that, once perceived, is characteristically distinguishable, and is at

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* In 1856-57 this gauge showed 15′ 11″, which would give a much larger area; but the capacity of the *jhíl* has been ascertained only up to 12 feet on the gauge.

† For the last conclusion arrived at by experts on the subject of *reh*, reference should be made to the "Report on the deterioration of land by *reh* in the Aligarh District, North-Western Provinces," by a Committee held in 1878.

Chapter I, A.
Descriptive.
Reh.

times so strong in its odour as to give the sense of being eaten like food. At this point there is no doubt of the damage. But there is a second stage, reached before the final ruin, wherein the corners of fields look unhealthy; perhaps they have a few stunted stalks on them, perhaps they are quite bare. The middle of the field which has a crop, has also here and there small patches of white or barren soil, telling too clearly of the diminished yield. But the effect of several of these patches, irregular in shape, and scattered in diverse quarters, is to make any estimate of the produce of the field very uncertain. There is, however, even before the second stage an inceptive one, where the devastation has only just begun. Here no *shor* is apparent on the surface of the soil, but the unhealthy look of the crop, or it may be (as in wheat), a kind of withered precociousness in the ears, shows that things are not as they should be. The fields, to a casual glance, bear their usual variegated burden of yellow and white and green; but the *zamíndár* knows to his cost that the curse has come upon him.

Rainfall, temperature, and climate.

Table No. III shows in tenths of an inch the total rainfall registered at each of the rain-gauge stations in the district for each year, from 1866-67 to 1882-83. The fall at head-quarters for the four preceding years is shown in the margin. The distribution of the rainfall throughout the year is shown in Tables Nos. IIIA and IIIB, while Table No. IV gives details of temperature for each of the last 14 years, as registered at head-quarters. The average rainfall for the whole district during the 12 years, 1869—1879, is 23·1 inches. This is the result of carefully abstracting the monthly returns published in the *Punjab Gazette*, but it is curious when compared with the larger rainfall in Pánipat, and the larger rainfall on the other side in Gurgáon, which certainly has the reputation of being a thirsty tract as compared with this district. The *tahsíl* averages do not help in the matter, as Delhi has a larger figure than the others; thus, Sunipat gives 22·7, Delhi 25·5, Ballabgarh 21·3 inches. At pages 12 to 14 will be found an analysis of the annual rainfall for the above 12 years, arranged according as it affects the autumn or the spring harvest, or both. The climate of the district is what might be anticipated from its position, as lying between the plains of the Punjab and those of the more tropical parts of Bengal. The cold weather is much like that of the Punjab, and there is a bleak north-west wind which makes the temperature seem lower than it actually is. On the other hand, the hot weather begins sooner by a good fortnight, though the nominal dates for commenceing and leaving off *pankhás* are the same as those of Lahore. Tents become unpleasant after April 1, when, if the season is a normal and favourable one, the hot wind *luh* begins. During the succeeding months, down to the middle or end of June, the west wind should blow moderately and equally. A violent west wind is hurtful to the crops, while an east* wind is unhealthy for

Year.	Tenths of an inch.
1862-63 ...	532
1863-64 ...	355
1864-65 ...	284
1865-66 ...	295

* "If the east wind blow in *Jeth*, that is bad. If a Ját (mount and) make a horse to dance, that is bad. If a Brahmin take to wearing a knife, that is bad."

Chapter I, A.

Descriptive.

Rainfall, temperature, and climate.

men. The four months, *Phágan*, *Chait*, *Baisákh*, and *Jeth* make up the the *Kharsa* season—the dry months. Then comes the *Chaumása*—the four rainy months—*Asarh*, *Sáwan*, *Bhádon*, *Asoj*. In this period plentiful rain is expected and wished for, especially in *Bhádon*.* In *Asoj*, however, it is getting too late for cotton and *til*.† The air then, if the west wind blows, is fresh and healthy; the east wind is very debilitating and is said to produce boils and fever. *Asoj* brings us on to October, when the nights are beginning to get cool. Then comes the feverish season, which is always bad in Delhi, but during the last few years has been so fatal as in some parts to materially diminish the population. The canal villages, which might be thought most likely to suffer, have not been distinguished lately in this way. Towards the end of November or the beginning of December matters begin to improve, for the *jára* or cold season has well begun. The four months—*Kátik*, *Mangsir*, *Poh*, *Mágh*—bring us round again to the *Kharsa*. Rain is almost unknown in November, but is thought good for husbandry in December,‡ as if there is no rain, there will be heavy work for the oxen in watering the young *rabí* crops,§ and in *Poh*, though late, it is better than nothing.‖

Disease.

Tables Nos. XI, XIA, XIB, and XLIV give annual and monthly statistics of births and deaths for the district and for its towns during the last five years, while the birth and death-rates since 1868, so far as available, will be found in Chapter III for the general population, and in Chapter VI under the heads of the several large towns of the district. Table No. XII shows the number of insane, blind, deaf-mutes, and lepers as ascertained at the Census of 1881; while Table No. XXXVIII shows the working of the dispensaries since 1877. In the district Census Report for 1881, the Deputy Commissioner wrote as follows:—

"The sanitary condition of most of the villages is as bad as it can possibly be. Each village is surrounded by dung-hills, and by one or more stagnant pools. In most houses the families and the cattle sleep in the same quarters, and the water of the wells is frequently brackish, or largely impregnated with organic matter. The district has seldom been visited by cholera, and the mortality from this disease has never been very high, but the villages and smaller towns suffer greatly from periodic epidemics of fever, which cause great mortality."

Delhi Boil.

The only peculiarity in the way of disease in the district is the Delhi boil. The causes of this sore are as yet not known,

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* There are many sayings in the popular vocabulary exemplifying this: "If it rains in *Har*, it will make (the country) prosperous." "The showers of *Sáwan* are filled with pearls." "(In) the showers of *Sáwan*, dry and moist (soil) all becomes green." "If it rains in *Bhádon*, then both harvests will be (good):" while heat for *Jeth* and rain for *Bhádon* are pithily indicated as desirable in the forcible lines:— "Talk as a rule is good, but not too much; silence is good, but not too much. Rain is good, but not too much; sunshine is good, but not too much. But the more we get the better of rain in *Bhádon*, or sun in *Jeth*, or talk in our story-tellers, or silence in our wives."

† "If it rains in *Asoj*, the *til* won't give (good) oil, nor cotton trees (good) pods."

‡ "With rain in *Mangsir*, the wheat will be of good colour."

§ "If watering is not given in *Mangsir*, surely a thief has carried off the oxen."

‖ "If it rains in *Poh*, there will still be something of a crop, full or thin."

Statement of Rainfall in the Delhi District from 1867 *to* 1879.

Name of Tahsíl.	Month.	Years.												
		1867-68	1868-69	1869-70	1870-71	1871-72	1872-73	1873-74	1874-75	1875-76	1876-77	1877-78	1878-79	Monthly average.
Delhi.	April	0·7	0·9	...	1·5	0·4	0·3	...	...	...	...	0·2	1·5	0·5
	May	0·7	0·1	...	...	3·3	1·1	2·4	...	0 5	2 6	0 2	0·5	1·0
	June	0·9	2·3	0·9	6 2	4·2	...	0·2	2 9	0·4	2·5	3·7	0·5	2·1
	July	13 7	1·1	6 5	2 8	8 3	11·1	19·8	9·9	3·4	4 6	1·3	11·7	7·9
	August 1st half	1·7	0·3	0·1	7·0	5·1	4·2	4·5	0·6	5 0	0·4	0·1	0·2	2·4
	Total ...	17·7	4·7	7·5	17·5	21·3	16 7	26·9	13·4	9·	10·1	5·5	14·4	13·8
	August 2nd half	5·5	...	1·2	4·5	2·2	6·4	...	3·2	0·2	0 2	...	16 8	3·4
	September	0·2	0·1	8·3	0·5	0·7	6·1	8·5	3·1	27·4	5 3	0·5	0·5	5 1
	Total ...	5 7	0·1	9·5	5·0	2·9	12·5	8·5	6·3	27·6	5·5	0 5	17·3	8·5
	October	...	...	1·7	...	...	...	1·2	...	0·1	1·9	5·3	...	0·9
	November	...	...	...	...	...	...	...	...	...	...	...	...	...
	December	1·7	...	...	0·1	...	0·5	0·5	...	...	...	2·4	...	0·4
	January	0·5	0·6	...	0·5	2·0	0·4	0 9	0·1	...	2·3	...	...	0 6
	February	1·9	1·2	...	0·6	0·7	...	...	1·2	0·1	2·1	1·2	...	0 8
	March	0 5	3 2	1·0	...	0·1	...	1·0	...	1 3	0·2	0·1	0·2	0 6
	Total ...	4·6	5·0	2·7	1·2	2 8	0·9	3 6	1·3	1 5	6·5	9·0	0·2	3 3
	Annual total of Delhi Tahsíl ...	28·0	9·8	19·7	23·7	27·0	30·1	39·0	21·0	38·4	22·1	15·0	31·9	25·5

Chapter I, A.
Descriptive.

Rainfall, temperature, and climate.

Statement of Rainfall in the Delhi District from 1867 *to* 1879.—(Continued.)

Name of Tahsíl.	Month.	Years.												
		1867-68	1868-69	1869-70	1870-71	1871-72	1872-73	1873-74	1874-75	1875-76	1876-77	1877-78	1878-79	Monthly average.
Ballabgarh.	April	0·2	0·3	...	1·3	0·5	...	...	...	...	...	0·5	0·3	0·3
	May	0·5	0·3	...	...	2·1	0·9	1·5	...	1·6	0·6	0·1	1·3	0·7
	June	0·4	4·1	0·5	3·3	5·4	...	1·5	4·1	...	0·3	1·9	0·3	1·8
	July	12·5	0·3	9·7	5·1	9·4	7·3	14·0	11·8	0·9	8·3	3·2	5·5	7·3
	August 1st half	2·8	...	0·7	2·2	5·4	6·1	5·5	1·3	3·5	1·2	...	1·3	2·5
	Total ...	16·4	5·0	10·9	11·9	22·8	14·3	22·5	17·2	6·0	10·4	5·7	8·7	12·7
	August 2nd half	3·9	...	2·3	3·2	0·9	3·3	...	4·0	0·7	...	0·2	9·9	2·4
	September	1·6	...	7·1	0·4	0·6	3·0	4·4	1·6	23·9	1·8	0·5	2·1	3·9
	Total ...	5·5	...	9·4	3·6	1·5	6·3	4·4	5·6	24·6	1·8	0·7	12·0	6·3
	October	0·4	...	0·7	...	...	...	1·8	...	0·8	0·5	4·1	...	0·7
	November	...	...	...	...	...	...	...	...	...	...	0·1	...	0·0
	December	0·5	...	...	0·3	...	0·4	0·1	...	...	...	3·2	...	0·4
	January	0·7	1·4	...	...	0·8	...	...	0·2	...	1·6	...	...	0·4
	February	1·3	0·7	...	1·2	0·4	...	...	0·7	0·1	2·3	0·4	...	0·6
	March	0·2	1·9	0·5	...	0·1	...	0·4	...	C·5	0·6	...	...	0·4
	Total ...	3·1	4·0	1·2	1·5	1·3	0·4	2·3	0·9	1·4	5·0	7·8	...	2·4
	Annual total of Ballabgarh Tahsíl ...	25·0	9·0	21·5	17·0	25·6	21·0	29·2	23·7	32·0	17·2	14·2	20·7	21·3

Rainfall, temperature, and climate.

Statement of Rainfall in the Delhi District from 1867 *to* 1879.—(Concluded.)

Name of Tashil.	Month.	Years.												
		1867-68	1868-69	1869-70	1870-71	1871-72	1872-73	1873-74	1874-75	1875-76	1876-77	1877-78	1878-79	Monthly average.
Sunipat.	April	1·2	0·2	...	0·4	0·3	0·8	...	...	...	...	1·3	1·7	0·5
	May	1·1	...	...	..	1·2	0·8	1·9	...	0·3	1·4	3·4	1·8	1·0
	June	1·9	2·0	...	13·4	5·7	...	0·2	4·4	...	1·5	1·4	0·5	2·6
	July	7·8	...	13·4	10·3	4·5	5·9	14·6	8·7	3·3	12·7	...	2·1	6·9
	August 1st half	4·2	...	1·7	3·5	2·9	7·4	4·2	1·6	5·1	0·5	...	0·7	2·7
	Total ...	16·2	2·2	15·1	27·6	14·6	14·9	20·9	14·7	8·7	16·1	6·1	6·8	1·7
	August 2nd half	4·9	...	...	2·0	0·4	0·4	...	0·6	0·6	2·0	...	10·6	1·8
	September	1·4	0·3	2·5	2·4	1·1	5·2	2·1	2·3	24·5	3·3	1·8	1·8	4·1
	Total ..	6·3	0·3	2·5	4·4	1·5	5·6	2·1	2·9	25·1	5·3	1·8	12·4	5·9
	October	..	...	1·6	...	...	...	1·2	...	...	1·7	3·2	...	0·6
	November	...	...	...	...	...	...	...	...	...	...	0·1	...	0·0
	December	0·8	...	0·1	...	..	0·9	0·2	...	...	...	3·4	...	0·5
	January	0·4	0·2	...	0·6	0·4	0·6	...	...	...	0·5	...	0·1	0·2
	February	1·4	0·6	...	0·9	7·9	0·3	0·8	0·8	...	1·2	0·3	...	1·2
	March	0·4	2·6	1·2	...	0·3	...		...	0·4	1·0	0·3	...	0·7
	Total ...	3·0	3·4	2·9	1·5	8·6	1·8	4·0	0·8	0·4	4·4	7·3	0·1	3·2
	Annual total of Sunipat Tahsíl ...	25·5	5·9	20·5	33·5	24·7	22·3	27·0	18·4	34·2	25·8	15·2	19·3	22·7
	Annual totalfor the District ...	26·2	8·2	20·6	24·7	25·8	24·5	31·7	21·0	34·9	21·7	13·5	24·0	23·1

Chapter I, A.

Descriptive.

Delhi Boil.

but the best local opinions point to a scorbutic origin. Some years ago in the *Indian Medical Gazette* there appeared a memorandum by Lord Mark Kerr, sounding a pæan over the supposed fact that "at the end of eight years" (after his Lordship's return home from India in 1864) "the disorder has almost entirely disappeared from Delhi." Inquiry was instituted by the Sanitary Commissioner with the Government of India, but the reply received did not show any evidence either one way or another. There had been no doubt a decided temporary decrease, but it was not as yet certain to be permanent, and conclusions were considered premature.* At the City Dispensary in Delhi the annual average of cases treated for this disease for five years (1875—79) was 37.

Health of canal villages.

In the villages irrigated by the Western Jamná Canal the standard of health and vitality is materially lower than elsewhere, (see further Chapter III, Section A). This fact attracted the attention of Government as long ago as 1847, when a Committee was appointed to inquire into the sanitary state of irrigated districts. The Medical Officer, Dr. Dempster, in his memorandum forming part of the report, showed that in many villages of this part, 75 per cent. of the people had disease of the spleen, and that the average proportion of the persons thus diseased to the total population of the villages examined during the inquiry, was nearly 50 per cent. In 1867 another inquiry was instituted by the Government of India, and the results reported by Dr. A. Taylor, Civil Surgeon of Delhi. This report has been printed (Selections fron the Records of the Government of the Punjab and its Dependencies, New Series, No. VI). Dr. Taylor showed clearly the presence of an unusual amount of spleen disease, and its close connection with the degrees of swampiness and want of drainage found in various parts. The villages "enjoying the greatest advantages" of irrigation were almost invaria-

* The Punjab Sanitary Commissioner, when called on for opinion and facts, said that there was great doubt as to the latter, consequently an opinion induced from them would be premature. He evidently inclined to the opinion, however, that the disease could be said only to be in abeyance. The cases in the Dispensary, though less than half in 1870 and 1871 as compared with the five years before, had in the earlier months of 1872 again mounted up to nearly their former numbers.

The following medical description of the sore has been furnished by Lálá Rám Kishendás, Assistant Surgeon in charge of the City Dispensary at Delhi :—

"This disease is similar in its nature to Biskra Button, Aleppo evil, Lahore sore, Mooltan sore, &c. ; it would be better, therefore, to call all of these by a common name ; and the designation 'Oriental sore,' proposed by some writers, is the most appropriate. It attacks persons of all ages and positions in life and both sexes indiscriminately, but children between the ages of five and ten seem most liable to it. Depraved nutrition from climatic influences is believed to be the cause of its production, but the exact nature of these influences is unknown.

"It attacks generally the most exposed parts of the body, *e.g.*, the face, forearms, hands, legs, and feet, but has been seen on the chest, abdomen, and other parts generally covered as well. It commences as a papular eruption, attended with itching, soon followed by a crushed pustule and ultimately by irregular ulceration, which may last any length of time, but which, so far as I have seen, never destroys the deeper tissues. There is no certain cure for it : strong caustics sometimes eradicate it by destroying the nucleated cells contained in the meshes of the tissues attacked. There are several stimulating and astringent native remedies in vogue as specifics for the sore, but I have never seen any material benefit arising from them. Change to a better climate has appeared beneficial to troops suffering from it. Its pathology is under dispute ; some observers of authority say it is of a parasitic origin, while others of equally high reputation deny this altogether."

Chapter I, B.

Geology, Fauna and Flora.

bly those where the debilitating disease assumed its most prominent form. While drawing a sad picture of the state of the people, he alludes to the improved drainage of the Najafgarh tract, and shows that, while in 1845 the splenic enlargements were 43 per cent., in 1867 they were only 5·37. The flood level had sunk three feet, and the aspect of the people was healthy and robust.

Alleged evil effects of canal water.

Besides fever, the *zamíndárs* of the canal villages complain that copious irrigation of the land brings with it, though they do not know how, impotence in the men. On this point information is of course very doubtful: the earliest report on the matter, that of Mr. Sherer (Selections from the Records of the Government of India in the Public Works Department No. XLII) expressed the same opinion. "The unfruitfulness of women in canal villages is a subject of "common remark, and the consequent difficulty of inducing other Ját "families to give their daughters to the men of Pánipat, and the "environs of the canals generally, is very great." Dr. Taylor heard that sexual incapacity existed greatly among men, but that women were not barren in the same proportion. The local belief is the same; and it is said in addition that the women are generally more healthy than the men. Two reasons are given—the women come from other villages—often villages not irrigating from the canal, and so have a healthier stock to begin with. Secondly, they work more than the men. This sounds strange, and is only half true; but there is no doubt that the women in the canal villages look less lazy and demoralized than the men, who are indeed a very degenerate race.

SECTION B.—GEOLOGY, FAUNA, AND FLORA.

Geology.

Our knowledge of Indian geology is as yet so general in its nature, and so little has been done in the Punjab in the way of detailed geological investigation, that it is impossible to discuss the local geology of separate districts. But a sketch of the geology of the province as a whole has been most kindly furnished by Mr. Medlicott, Superintendent of the Geological Survey of India, and is published *in extenso* in the provincial volume of the *Gazetteer* series, and also as a separate pamphlet.

Mines and minerals.

The mines of the district are thus returned in the Administration Report:—Chalk mines at Kasúmpur and Arangpur, the former leased by the villagers for Rs. 300 a year, the latter not worked at present; 24 *kankar* mines in various villages, yielding 933,000 maunds annually, worth some Rs. 8,000; *bajri* mines at Bánskauli and Raisínah, yielding annually 1,000 maunds, worth Rs. 250; nine stone mines yielding 4,950 maunds, worth Rs. 1,265; a crystal mine at Arangpur, not worked at present. The quantities here stated are probably unreliable. The noticeable minerals therefore of the district, so far as known, are stone, crystal, *kankar* and chalk; though it is said the quartz-like formation of the hills* renders the existence of

* Their scientific description is given as follows :—

"A core of quartzite with more or less vertical bedding, and the associated rocks as far as they are exposed on the flanks of the ridges, indicate advanced metamorphism."

gold not impossible, and the known presence of crystal at Arangpur has been recently alluded to as favouring the probability.

Stone.

The quartz-like kind of stone is hard, and not easily worked, except for uses not requiring delicate shape. It is seen at its best in many of the old buildings round Delhi, where it fitly harmonises with the sombre dignity of the Pathán style. For the Agra Canal a considerable quantity was used, but for the new Delhi Branch the softer and more malleable Agra stone has been preferred. There is also a sandstone found in the hills near Ballabgarh, which is soft and looks handsome when worked up. The Rájá's palace, now the *tahsíl* at Ballabgarh, shows some very pretty pieces of this work in pillars and arches.

Crystal.

The only place where crystal has been brought to the surface is in the limits of Arangpur, a hill village about two miles south of Delhi. A mine here was first started, it is said, a hundred years ago by the Rájá of Ballabgarh, who spent a good deal of money in getting out and sending for sale a supply of the mineral. Most of the pieces, however, were small octagonal blocks of no great commercial value, and after this one attempt the Rájá gave up the enterprise and closed the mine. After the Mutiny a Khatrí of Delhi took a contract for working it ; but after spending some Rs. 1,500 in trying to find the crystal, gave up the attempt and his contract also. The locality of the mine is rather inaccessible ; it lies to the south-west of the village, which itself is a collection of huts, at a considerable distance from the main road. Dr. Thompson, in his report on rock crystal mines says that "the crystal does not occur in its primitive position, "but in a secondary deposit of silicious breccia, very highly impregnated "with iron ; each crystal is cased in a sheath of hæmatite. As we "go downwards the rock becomes less ferruginous, and lower still is "met with in pieces of pure quartz, embedded in a matrix of almost "pure white clay."

Kankar.

*Kankar** is found more or less extensively throughout the district. In Sunípat it is not regularly worked, but in nine villages it has been found, and doubtless might be obtained, if needed, in a good many more. In Delhi *tahsíl* 33 villages produce it, chiefly in the subcolline and marshy parts. In Ballabgarh 22 villages are shown as producing it. Very little digging is required to reach the beds, and in some of the channels of the hill streams it comes out on the surface. The chief element in its cost is that of carriage and transport to the place where it is required for use. It is not appropriated for roads in this district so exclusively as in others, where it is the only material available. Macadamite is also used, and the station roads are many of them laid with *bajri*, a reddish gravelly *kankar*† found in the beds of hill torrents and such like places. *Bajri* is cheaper than *kankar*, but is not so durable, and softens more under heavy rain.

"* A calcareous concrete consisting of carbonate of lime in irregular kind of foliated pieces." ("Punjab Products," p. 141.)

"† Disintegrated gneiss," as Mr. Baden-Powell says, p. 39, "Punjab Products."

Chapter I, B.

Geology, Fauna, and Flora.

Chalk

Chalk is either worked, or known to exist in Kasúmpur Mahrauli, Malikpur Kohí, and Arangpur. It is dug out of a rude mine made by sinking a shaft 30 or 40 feet deep, and five or six feet in diameter, and then making tunnels in all directions horizontally at the bottom. The blocks *(dallá* or *dhír)*, that are turned out whole, are sold on the spot; the smaller pieces *(tikyá)* are taken to the Málchah village, and there washed and dried, and then sold for whitening. The local idea makes stone fuse into chalk by a kind of subterranean ignition. The product is of some value: in the village of Kasúmpur, the lease of the chalk mines has for some years past brought in an income of over Rs. 300, on the average. The expenses of excavation, carriage, washing, and making up into cakes for market sale, are estimated at Rs. 15-6 per 100 maunds, the *bázár* price of which is about Rs. 30.*

Salt.

Salt is not now made anywhere in the Delhi district, though it used to be in certain Khádar villages, where the marks of the earth-beds (*sar*) are still evident. Saltpetre is occasionally made in different parts. During the last ten years 30 licenses have been given for this purpose in 15 villages.†

Saltpetre.

Trees.

Coming to vegetable products of the soil, the district is not well wooded throughout, but in many parts the trees are abundant enough to give a pleasant variety to the landscape, and in some a bird's-eye view of the country from an elevated spot gives an effect not unlike that of an English park. In other parts, particularly in the hills, in the marshy lands near Najafgarh, and in the inferior parts of the Khádar, trees are scarce, and there is nothing to relieve the monotony of the prospect. Along the Western Jamná Canal are fine avenues of *shisham* and other trees, and promising plantations of *kikar* and *shisham* have sprung up on the banks of the Agra Canal. The Mathrah road is not well shaded, nor, except in a few parts, is the Grand Road in the north. The commonest trees are the well-known *kíkar* (*Acacia Arabica*) and *jál* (Panjábí *pílu* or *van—Salvadora oleoides*). In uncultivated lands these are specially found. In Sunípat, for instance, there are woody stretches of the *jál* extending for miles, and in the hot weather, especially if the *rabí* crop has been poor, hundreds, almost thousands, of the more destitute classes are to be seen feeding and sleeping by turns in the stunted groves. The *pípal* (*Ficus religiosa*), *farásh* (*Tamarix Indica*), *ním* (*Azadíraráchta Indica*), *bor* (*Ficus Indica*), *bakain* (*Melia sempervirens*), *dhák* (*Butea frondosa*) and *bér* (*Zizyphus jujuba*) are indigenous and found in many places, as also the bushes—*karíl* (*Capparis aphylla*), *khair* (*Acacia cotechu*), *jánt* (*Sesbania Ægyptiaca*), and *hingot* (*Balanites Ægyptiaca*.) It is doubtful whether *shisham* and *siris* are indigenous in

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* The *zamíndárs* do not dig the chalk themselves; they lease the righ tto strangers, generally men of low caste, living in the neighbourhood. Cooly labour at this work fetchs 2½ annas per diem for the digger working down below, and 2 or only 1½ annas for the lighter work on the surface.

† These are:—

Sunipat—Rámpur, Kundal, Pinána, Nizampur.

Delhi—Dindhása, Malakpárzer, Najafgarh, Kar.

Ballabgarh—Bhopáni, Jaik *alias* Unchágáon, Shájahánpur, Majheri, Síhí, Phapúnda, Aghwánpur, Fatehpur Biloch.

Chapter I, B.

Geology, Fauna, and Flora.

Trees.

the sense of not having been introduced from other parts; they grow well only where they get more than natural moisture. In canal villages a common tree is the *jamoá* or *jamúá*, which appears to be a variety of the *jáman*—the natives call it as a synonym *chotá jáman*. This tree grows on the side of small watercourses on the edges of fields, reaches a height of 50 or 60 feet, and has a dark fresh foliage like the *jáman*. The fruit is very inferior. The fruit-trees found in the more favoured spots are numerous and good. Some gardens near Delhi produce mangoes of a delicious flavour: the *jámans* (*Sizygium jambolanum*) are not bad; while oranges, peaches, plums of sorts, lemons, pomegranates, guavas, figs, *alúchás* (*Prunus domestica*), *imli* (*Tamarindus Indica*), &c., are also found.

Special plants.

One or two plants seem to deserve mention here on account of their importance to the agriculturist as a source of income, or as affording valuable material for various agricultural purposes.

(1.) The *singhárá* or water-nut (*Trappa bispinosa*) grows in ponds and pools of standing water in many parts of the district. It is said, however, that the water must be clean (an expression to be interpreted according to Ját rather than English ideas,) and the soil of the bed of the pond should not be under the influence of *reh*. The long stalks of the plants reach up to the surface of the water (in which they grow), and upon which float their green leaves, and their pure white flowers expand beautifully among them in the latter part of the afternoon. The nut grows under water after the flowers decay, and is of a triangular shape, and covered with a tough brown integument adhering strongly to the kernel, which is white and esculent, and of a fine cartilaginous texture. They ripen in the latter end of the rainy season and are eatable till November. The best plants are then (Hindú month *Kátik*) left for seed: in *Mangsir* the cultivators break the nuts off and put them in *matkás*, keeping the vessels always filled with water, changing it every other day. In *Magh* they take the seed to a pond, and throw it in broad-cast; or if the water is scarce they sow it in beds (*kiáris*) with water standing in them. The plant shoots up in the spring; its green head is called *chháti*. There are two kinds, *hará* (green) and *lál* (red.) The green kind is generally eaten fresh, while the red is ground into a flour which is eaten by Hindús at times of abstinence (*bart*) from food. They are then allowed to eat fruits (*phal-ahár*) among which this is reckoned. The produce of the plant is very variable, but a *biswa* of land covered with water should grow 1 or 1½ maunds, giving 20 or 30 maunds to the *bigha*. The price is also uncertain; at the first incoming of the crop, especially if it is a light one, the fresh nuts will cost 1 or 1½ anna a *ser*; in the full season they may come down to 8 or 6 annas per maund, and when very cheap may be only *taka dhari*, *i.e.*, 6 pies for 5 *sers*= 4 annas a maund. Dry nuts are sold at 8 *sers* per rupee. The Najafgarh *jhil* used to be noted for its produce of this article, which is considered a light and healthy food; but at present, though it certainly grows there, it is not so largely cultivated as formerly. The sowing is done by Jhínwars (Kahárs), who are allowed to use the village ponds for the purpose by the *zamindárs* either as return for services to the community, or on payment of rent; say

Chapter I, B.

Geology, Fauna, and Flora.

Special plants.

Rs. 2 a *bigha*, or on condition of letting the families of the proprietors take a portion of the crop from time to time as they need it for food. The *singhára* in some villages is a valuable source of water-income (*jalkar*) to the community.

(2.) '*Jháú* (*panj-pilchi—Tamarix dioica*) is found chiefly in Khádar uncultivated land, especially in the *belás* of the river. It grows sometimes seven or eight feet high, but on the average reaches only to a man's waist and answers to many uses with the *zamíndár*—either as fuel, or made up into baskets or rustic brooms (wherewith to sweep his threshing floor), or lining the sides of a *kachá* well. The baskets are made by Kahárs, who pay 1 anna per day for the right of cutting as much of the bush as they can carry away in their *banghy*. The actual cash income therefore is not much, except on lands near the city, but the agriculturist looks on it as of considerable use.

(3.) *Sarkandá* (*Saccharum procerum*) is a reed that grows to a height of 10 or 12 feet; it is found in alluvial marshes, but also on the side of the canal, and sometimes of its distributaries. It must have moisture, and is fond of mud. Some villages, such as Jákhauli, Tehri, Daulatpur, and Burari, make very considerable sums of money by the sale of this reed. It is used for the roofing of thatched buildings, and for the reed-chair which is so much in fashion among natives. Its price is measured by sheaves, each tied up with a rope made of the leaves, two and a half cubits long. Such a sheaf is called *bind* and is worth about an anna.

(4.) *Pála* (*Zizyphus nummularia*) is a small thorny bush-weed which grows pretty well all over the district, but chiefly in poor lands, and especially on the ridge-like tract of land in Delhi *tahsíl*, near Nangloi Ját, and Bakarwála. In Sunípat it favours Lálherí and Rajlú, and that sandy neighbourhood, while in the hills it grows extensively. In the Ballabgarh Bángar, too, there is a great deal. This uninviting plant gives a very useful food for buffaloes, cows and goats. Camels and goats indeed like it better than any thing almost. It is considered heating, and so is good for the cold weather.

It is cut twice in the year (in *Kátík* and *Chet*) with a *gandasi*, and is sold at 3, 4, or 5 maunds the rupee.

Wild animals.

The following note on the wild animals of the district has been kindly furnished by Dr. Kavanagh :—

"Pig abound all along the banks of the Jamná, being found in the *jháú* jungle where there are no crops, and in the latter when they are high enough to afford cover. Foxes and hares are plentiful on the eastern bank of the Jamná, but do not seem to inhabit the western bank to the same extent. Black buck are found almost everywhere. *Chikára* abound in the range of hills which runs north-east of Delhi, being especially numerous at Bhunsi, Sinah, and the part of the Ridge in this neighbourhood. Wolves are not plentiful, but they are to be usually found in the neighbourhood of the old cantonment, especially during the time soldiers are there encamped, at which time, I have seen them in numbers quite close to my tent. Jackals abound. Hares are found generally throughout the district. Peafowl are plentiful. Duck and snipe are plentiful in ordinary years, but in dry years they are scarce. The *nilgai* is to be con-

stantly found near the villages of Borari and Khadipur, and in my pigsticking excursions I constantly came across them in these parts. They are also constantly found at Bhunsi due east from the Ridge. Black and grey partridges are plentiful, the former being found principally in the high jungle along the banks of the Jamná, and in the crops when the season is advanced. The mongoose is very common, and so is the hedge hog. I have known the latter commit sad havoc in a garden in the Cantonments. Snakes of every kind are plentiful, the cobra especially so. The old Fort called the Kofla is infested with them, and it has been a common pastime for members of the garrison to go there hunting for them, especially in the rainy season or immediately preceding it.* Leopards are found in the outlying villages. I have myself seen them at Tuglakábád. *Pára* are abundant, especially in the neighbourhood of Borari on the bank of the Jamná, where in my pigsticking excursions I have seen as many as, 40 or 50 in an hour. *Mahsír*, *rohú*, and *batchwa* are found in the river Jamná and at Okhlah in the Agra Canal, and the entire river is infested with muggurs the *gurryál* predominating; but the snub-nosed man-eater is also plentiful. In that part of the river opposite the present rifle range they may be seen any afternoon in hundreds swimming about or basking on the edge of the water. Between the old Fort and Okhlah, they are equally numerous."

Monkeys in some villages bordering on the shady avenues of the Western Jamná Canal are quite a nuisance.† Within the past five years rewards to the amount of Rs. 908 have been given for the destruction of 10 leopards, 367 wolves, and 1,128 snakes. Ducks of various kinds are found in the ponds in the cold weather; snipe in several places in marshes ; quail are not uncommon in the fields ; partridges, both black and grey, are abundant, and *kúlan* are fond of the fields of gram when the grain has not yet hardened.

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* Natives distinguish three kinds of snake : (1) *kála*, black, poisonous, and almost) always fatal ; (2) *pílá* (yellow) not fatally poisonous ; (3) *chitkauria* (spotted worse than the *pílá*, but not so bad as the *kála*. *Kale ke age diwa na bala*—is a well known saying among the *zamindars*. Literally : "In presence of the black (snake) the lamp won't burn." There is an idea that if a *kála sámp* gets into the house, the lamps burn dimly, under the fascination, as it were, of the animal. As a proverb it means there is no doing anything against a powerful person.

† Mr. Maconachie writes : "I once heard it seriously urged as an objection to the alignment of a *rájbahá* through the lands of the speaker's village, that the canal officers would be sure to plant trees, and trees would be sure to bring monkeys, and monkeys would do all sorts of damage to the crops. The fact is a serious one, especially as the Jàt may not kill a monkey even when he catches him *in furto manifesto*. All that he can do is to station a loud voiced *kamin* at the point he most wants guarded, hoping that he won't go to sleep. But as a rule the monkeys look in portentously good condition."

CHAPTER II.

HISTORY.

Chapter II.

History.

Early History.

The history of the Delhi district, previous to British rule, is the history of the city of Delhi, which has from the time of its first foundation been the seat of the ruling dynasty, Rájpút, Pathán, Mughal or Mahratta. To write it in full would be to recite the history of Northern India. A brief outline of the principal events which have affected the fortunes of the city itself, with especial reference to the architectural remains which are there to be found, is given in Chapter VI; but no attempt will be made to furnish any more detailed narrative of the historical events which preceded the introduction of British rule.

Administrative arrangements in 1803.

On the 11th September, 1803, the Mahrattas were defeated in the battle on the Hindan by General Lake; and three days afterwards the English entered Delhi as the real masters of the Mughal Empire. The tract then added to the territories of the East India Company included a considerable strip of country to the west of the river Jamná, north and south of Delhi. It was determined to assign a large portion of the territory thus acquired to King Sháh Alam and his descendants, in order to provide for the maintenance and dignity of the Royal family. The arrangements to be made were thus described in a despatch by Lord Wellesley, dated Fort William, 2nd January 1805:—

"The Governor-General in Council has determined to adopt an arrangement upon the basis of the following provisions:—That a specified portion of the territories in the vicinity of Delhi, situated on the right bank of the Jamná, should be assigned in part of the provision for the maintenance of the Royal family. That those lands should remain under charge of the Resident of Delhi, and that the revenue should be collected and justice should be administered in the name of His Majesty Sháh Alam, under Regulations to be fixed by the British Government. That His Majesty should be permitted to appoint a Diwán and other inferior officers to attend at the office of the Collector, for the purpose of ascertaining and reporting to His Majesty the amount of the revenues which should be received, and the charges of collection, and of satisfying His Majesty's mind that no part of the produce of the assigned territory was misappropriated. That two Courts of justice should be established for the administration of civil and criminal justice, according to the Muhammadan law, to the inhabitants of the city of Delhi, and of the assigned territory. That no sentences of the Criminal Courts extending to death should be carried into execution without the express sanction of His Majesty, to whom the proceedings in all trials of this description should be reported, and that sentences of mutilation should be commuted. That to provide for the immediate wants of His Majesty and the Royal household, the following sums should be paid monthly in money from the Treasury of the

Chapter II.

History.

Administrative arrangements in 1803.

Resident of Delhi—to His Majesty for his private expenses, Sicca Rupees 60,000 : to the Heir-apparent, exclusive of certain *jágírs*, Sa. Rs. 10,000 ; to a favourite son of His Majesty, named Jaggat Baksh, Sa. Rs. 5,000 ; to two other sons of His Majesty, Sa. Rs. 1,500 ; to His Majesty's fifty younger sons and daughters, Sa. Rs. 10,000 ; to Shah Nawáz Khán, His Majesty's Treasurer, Rs. 2,500 ; to Sayad Razá Khan, British Agent at His Majesty's Court, and related to His Majesty by marriage, Sa. Rs. 1,000 ; total per mensem, Sicca Rupees 90,000. That if the produce of the revenue of the assigned territory should hereafter admit of it, the monthly sum to be advanced to His Majesty for his private expenses might be increased to one lakh of rupees. That in addition to the sums specified, the sum of Sa. rupees 10,000 should annually be paid to His Majesty on certain festivals agreeably to ancient usage."

According to this arrangement, the assigned tract, afterwards known as the Delhi Territory, was excluded, by Regulation VIII of 1805, from the operation of the General Regulations, and, subject to the restrictions alluded to in the despatch already quoted, placed under the charge of an officer styled the Resident and Chief Commissioner of Delhi. The King retained exclusive civil and criminal jurisdiction within the Palace, consulting the Resident in important cases, while throughout the assigned territory justice was administered according to Muhammadan law by British officers, but in the name of the King, and sentences of death were referred to the King for approval. The fiscal arrangements were under the entire control of the Resident and his subordinates. This assigned territory included, with certain exceptions, the whole of the present divisions of Delhi and Hissár. The chief exceptions were Sirsa and part of Hissár, held by the Bhattís,* and parts of Karnál, which were in the hands of independent Sikh Chiefs. There were also other exceptions in the estates of certain noblemen, who were found by the British in possession of considerable tracts, which they held, on tenures more or less permanent, from the Delhi Kings or the Mahrattas. Such were the estates of the Rájá of Ballabgarh in this district, of Jhajjar in Rohtak, and of the Begam Samru in Gurgáon. These alienations were for the time recognized by the British Government. It will be noted elsewhere in what manner the greater part of them successively, by lapse or otherwise, came under direct British rule. In addition to the payments for the maintenance of the Royal family already detailed, which were made from the British Treasury, the Crown lands and other property denominated *taiyúl* (see Chapter V, Section B), possessed by the King and several members of the Royal family, were in no way interfered with. The income from this source amounted to about 1½ lakh of rupees per annum.

In 1809, financial difficulties being removed by the cessation of war, the British Government increased the allowance of the Royal family to one lakh of rupees per month, this sum being payable without reference to the income of the Delhi territory. This state of things continued until 1832,

* See Gazetteer of Hissár district.

Chapter II.

History.

Administrative arrangements in 1803.

when by Regulation V of that year, the office of Resident and Chief Commissioner was abolished. The affairs of the Delhi territory were to be administered in future by a Commissioner in correspondence with the Government of the North-West Provinces, the powers heretofore exercised by the Resident as Chief Commissioner being vested in the Board of Revenue and the High (*Sadr*) Court at Agra. By the same Act it was laid down that the Commissioner of Delhi territory and his subordinates should in their administration conform to the principles and spirit of the Regulations. This enactment put an end to the anomalous system of administration above described; and henceforth, in name as well as in actual fact, the administration passed into the hands of the East India Company. The Delhi territory continued to form a part of the territory under the Government of the N. W. Provinces till 1858, when after the reconquest of Delhi from the Sepoy mutineers, it was annexed to the newly formed Lieutenant-Governorship of the Punjab.

Successive Residents.

The first Resident of the Delhi territory was Sir David Ochterlony,* who was in charge from 1803—1806. He had not been a year in office before the city was besieged by Holkar, whose large and well-appointed army was, as is well-known, successfully beaten off by a handful of Europeans and natives under the gallant leadership of their soldier-governor, until Lord Lake returned. General Ochterlony's bravery, however, was more acceptable to Government than his civil administration, and in 1806 he was removed to Ludhiánah, then a frontier station. His successor, Mr. R. G. Seton from Bareilly, was a man of high character and amiable temperament, but wanting in self-confidence, and in practical energy of decision. He leaned much on a stronger man than himself, Charles Metcalfe, who on Seton's departure for Europe in 1810 was appointed to the important post of Delhi Resident. For nine years he remained in it, developing that administrative experience and vigorous practical wisdom which afterwards placed him so high on the roll of Indian names. As a mere boy he had in 1809 confronted and successfully treated with the great Ruler of the Sikhs, and the early charge of the Delhi Residency was the immediate reward of his brilliantly self-reliant management of the treaty of the Satlaj—"one of the best kept treaties of Indian History." In December 1818 he entered the troubled period of his life by transfer to Haidarábád as Resident, and Ochterlony returned for two years with Henry Middleton as Collector. In 1821 Ochterlony went to Rájputáná, and, after an acting charge by Middleton, Alexander Ross was appointed in 1822 to the administration as Agent to the Governor-General. In 1823 William Fraser acted as Agent, and then Charles Elliot succeeded for a few months when he went as Agent to Farukhábád, and Charles Metcalfe came back again as Resident with control of Rájputáná,

* His name by a characteristic metathesis is known among the natives as *Loni akhtar*.

Chapter II.

History.

Successive Residents.

and the conduct of foreign relations with Kábul and Lahore. In this capacity he was present at the memorable siege and capture of Bhartpur. In 1828 he was appointed member of the Governor-General's Council, and was succeeded by Sir E. Colebrooke. The scandal that occurred in this gentleman's time is well-known, and also the unpopular but courageous part taken in the matter by Charles Trevelyan, then acting as his Secretary. The way in which the affair is described in a native account, perhaps by an intentional euphemism, is that "in his time, Rám Gopál, and others of his dependants, made bribes run high" (*rishwatsitání ká bazár garm kiyá*). The result was that the Resident was removed. William Fraser was appointed to act, but was also removed for openly showing sympathy with the accused. Mr. Hawkins succeeded, but as he was not acceptable to the king, Mr. Martin was appointed, and remained there till 1832, when the Residentship was abolished, and an Agency again constituted. Rájputáná was made a separate charge, leaving Delhi and the protected territory and the foreign relations still with the local administration. William Fraser, however, was murdered in 1835 at the instigation, as it was proved, of the Nawáb of Fírozpur,* who met with condign punishment. Then came the long administration of Thomas Metcalfe, reaching for 18 years up to 1853. During his time, in accordance with the march of political events, and the advance of our border toward the north, the protected States were put under George Clerk, afterwards Sir G. Clerk, at Ludhiánah. Hánsí, Hissár and Sirsa still remained connected with Delhi. In November 1853, Thomas T. Metcalfe died, and next month Simon Fraser became Agent and Commissioner. The tragic end of this officer, killed on the fatal 11th of May 1857, is well known. In September 1857, when Delhi was taken, Mr. C. B. Saunders was appointed Commissioner, while Hissár, Hánsí and Sirsa were made into the separate Commissionership of Hissár under the charge of Mr. E. Brandreth, with political charge of the petty States of Dujánáh and Lohárú. Pátaudi remained under the Delhi Commissioner.

Constitution of the district.

The Delhi territory was first divided regularly into districts in 1819. The district of Delhi, as then constituted, consisted of two *parganas*, the "northern" and the "southern." Between them they comprised the present Delhi *tahsíl*, the northern portion of the present Ballabgarh *tahsíl*, and a small portion now included in the Rohtak district. The greater part of the Ballabgarh *tahsíl* was then independent.† The present Sunípat *tahsíl*, with its head-quarters at Larsauli, formed the Larsauli *pargana* of the Pánípat district ‡.

* For a detailed account of this, see Col. Sleeman's "Rambles of an Indian Official", Vol. 2, pp. 209—231.

† Ballabgarh was confiscated after the Mutiny. See Chapter VI, ?

‡ See Gazetteer of the Karnál district.

Chapter II.

History.

Constitution of the district.

It was only transferred to Delhi in 1861. The present arrangement of the *tahsíls* dates from 1862. At some time between 1848 and 1853, a considerable tract to the east of the Jamná, including (by the Census of 1853) 160 villages and an area of 193 square miles, was added to the Delhi district from the districts of Mírath and Bulandshahr. This, under the name of the "Eastern *pargana*," continued to form part of the Delhi district until the Mutiny and the transfer of the Delhi territory to the Punjab. The immediate charge of what is now the Delhi district was held first by a Principal Assistant, and subsequently by a Collector under the Resident and Civil Commissioner. The first distribution of the Delhi territory was into divisions, an Assistant being entrusted with the charge of a division. At this time Sunípat formed part of the Northern Division with head-quarters at Pánípat, while Delhi and part of Ballabgarh formed the central division. Gurgáon and Rohtak and the parts round these made up the southern and western divisions. In 1820 the Civil Commissionership was abolished or changed for a Deputy Superintendent on Rs. 3,000 a month, whose duties were primarily revenue; and about the same time Delhi was put under the Board of Revenue, North-West Provinces.

Tahsíl arrangements.

The arrangements as to *tahsíls* appear to have been as follows:— As regards Sunípat there were at first two *tahsíls*, both having their head-quarters at the town; then another, a small one, with a very poorly paid *tahsíldár*, was made up at Ganaur. This was the state of things in 1835, when (1) Sunípat Bángar had a *tahsíldár* drawing Rs. 50 a month and the revenue was Rs. 2,13,040; (2) Sunípat Khádar, a *tahsíldár* on Rs. 50 and revenue Rs. 70,999; (3) Ganaur, a *tahsíldár* on Rs. 30 and revenue Rs. 67,444. It is not clear whether this revenue includes *jágír* or not. In 1836 the Ganaur *tahsíl* was incorporated with the Sunípat Khádar, and the *tahsíldár's* pay was revised as follows:, *tahsíldár* Bangár, Rs. 175; *tahsíldár* Khádar, Rs. 125. This administration continued till 1851, when the two Pánípat *tahsíls* were made one, and the same amalgamation took place in Sunípat, the one *tahsíl* being called Larsaulí. Larsaulí then remained, with its 205 villages, in Karnál district till 1857, when it was transferred to Delhi. For Delhi the head-quarters were at first in the city, then at Najafgarh; then there were two *tahsíls*, one at Mahraulí and one at Bawanah. The Bawanah *tahsíl* was moved to Alípur, and after the Mutiny to Delhi. Mahraulí was given up and its villages divided between Delhi and Ballabgarh. This last, in addition to the villages thus gained, included the *ráj* villages, and those of *parganah* Pálí-Pákal.

In May 1868, twenty villages, with a population of 6,990, were transferred from Gurgáon to the Ballabgarh *tahsíl*. In August 1868 six villages, with a population of 5,841, were transferred from Rohtak to Sunípat. At the commencement of Settlement operations in 1872, the distribution of villages among the three *tahsíls* was as

Chapter II.

History.

Tahsíl arrangements.

follows: Ballabgarh, 282; Delhi, 305; Sunípat, 211. Total, 798 villages. During Settlement the following changes were made:—

					Villages.
1.—Ballabgarh* received by alluvion from Bulandshahr	...	...	...	...	7
† gave to Delhi	...	...	...	...	6
Leaving finally	...	...	...	...	283
2.—Delhi ‡ received as above mentioned	...	...	...	...	6
§ ,, by alluvion from Meerut	...	...	...	...	3
‖ increased by separation of estates	...	...	...	...	2
¶ gave to Sunípat	...	...	...	...	27
†† ,, Meerut by diluvion	...	...	..	...	1
Leaving finally	...	...	...	...	288
3.—Sunípat ¶ received as above mentioned	...	...	...	...	27
‡‡ increased by separation of estates	...	...	...	...	1
Leaving finally	...	...	...	...	239

The transfers between the *tahsíls* were effected under the authority of Government Punjab's letter No. 1608 of 17th November 1875. In 1880 a change in the course of the Jamná transferred a small village to Bulandshahr.

State of Delhi district during the Mutiny.

The events of the Mutiny, so far as they are connected with the city of Delhi, will be found in Chapter VI. The following sketch refers rather to the district as a whole. As early as 1855, two years before the outbreak, a seditious pamphlet was published in Delhi, called *Risála Jehád*, directly preaching a religious war against the infidels who held the country. It was supposed to have been written about 1828 by one Maulavi Muhamad Ismail, a Wahábi, and about 1850 was translated into Hindi. Seditious placards, later on, were posted in various places of the city. When the actual rising took place at Delhi on the 11th May, the king sent a letter to the Commissioner of the Agra Division, G. F. Harvey, Esquire, who had been Commissioner for a short time in Delhi some years before, telling of the outbreak and protesting his helplessness. In the city, however, everything was done in his name, and orders were issued to the *zamíndárs* of the district for the collection of revenue. The papers in the printed volume of the trial of the king give a lively idea of the burlesque of order and Government that went on in the imperial city of the Mughals between May and September 1857. The king was nominally at the head of affairs; he was treated with reverence in the Oriental fashion, and amused himself with recording his signature, and occasionally short autograph

* Chák Makanpur—Chak Parasrámpur—Chak Latífpur—Belá Kalán—Chak Jaganpur—Chak Motipur—Chak Basantpur.

† Bijwásan—Salehpur—Samálkah—Kápasherah—Rájókhrí—Málikpur kohí.

‡ See above.

§ Arázi Sábapur—Arázi Badarpur—Arázi Pacháhera.

‖ Timarpur separated from Wazírábád and Ghogá from Bánkner.

¶ Bákipur—Basantpur—Bherah—Dahisarah—Jántí—Sersah—Kundlí—Nathúpur—Bazídpur Sabaoli—Sháfiábád—Kheri Manajat—Sháhfiábád Pána Papossian—Munírpur—Dheki—Nahrah—Nahri—Mandaurah—Turkpur—Mandauri—Hillálpur—Jhanjhaol—Jataulah—Katlúpur—Saidpur—Firozpur—Rámpur—Nizámpur Khurd—Kundal.

†† Jatwára Khurd.

‡‡ Jántí split up into Jántí kalán and Janti khurd.

Chapter II.

History.

State of Delhi district during the Mutiny.

orders, on the numerous petitions presented, but the real power was in the hands of the soldiers. Complaints are not long wanting of their violence and unruliness; the *baniá* is indignant at the summary appropriation of his goods going on, and compares the present administration unfavourably with that of the Káfirs, who, however wretched they were in religion, respected the rights of property. The *zamíndárs* of some village outside, having attacked and been beaten off by their neighbours with whom they have had a long standing grudge, write in fulsome terms congratulating the king on the massacre of the hateful English, portesting their fervent loyalty, and praying for punishment on their temporarily successful rivals. The king writes. "Let the Mirza see to this," and a foraging party soon after visits both villages, to the gain probably of neither. Grain carts coming into the city are not unfrequently seized by regiments on their own account, and when enquiry is made they protest they must do something of the kind as they do not get their pay. This last fact is one which, as time goes on, assumes an uncomfortable prominence, and makes it necessary for the imperial dignity to stoop to such unpopular exactions as a compulsory loan. This, it need hardly be said, is followed by more complaints from the *baniá,* who in return gets threatened with bodily penalties; and so matters go on; the mutineers are scarcely loyal to the 'emperor'; they quarrel among themselves for the best quarters, get little or no regular pay, but recoup themselves by plundering any person who seems weak enough to invite it and wealthy enough to be worth it. As regards matters outside, the Rájá of Ballabgarh trims to secure himself on both sides, but is hoplessly convicted of collusion with the king by letters under his own seal protesting his respectful loyalty to the Muhammadan, and his joy at the defeat of the English—so much so that a 'man he had in his own service belonging to the detested race he will not retain any longer near him.' The Nawáb of Jhajjar is as bad or worse, and the *zamíndárs* throughout the district fall into lawless habits of attacking their neighbours and plundering travellers.

Noble exceptions to the general disloyalty.

Yet there are bright exceptions of men who, moved by loyalty to our government, or pity for individuals, did good service in the way of protecting and concealing fugitive Europeans and helping them on their way to safe places. A list of rewards given for such work will be found in the Settlement Report; but a few are worthy of special mention. The most illustrious instance of hardly-tried loyalty in the district perhaps was that of Hidáyat Ali, a *risáldar* in the native army, on leave at the time of the outbreak. This gallant fellow* took in, fed, quartered, and for more than a week pro-

* The account locally given of the first appearance of the Collector of Gurgáon, and other persons of consequence, as fugitives is very graphic, and has no doubt had some picturesqueness added to it during the lapse of the twenty years since the occurrence of the facts on which it is founded. It begins somewhat in this fashion:—

"It was just about noon and the Risáldár Sáhib was taking a nap, when one of his men came and woke him saying—"there is a *gora* standing at some distance from the village under a tree, his head bare, and his clothes dirty, and he has a stick in his hand, and he makes signs." The Risáldár Sàhib got up at once and went out and found that this was a scout sent out by the fugitive party to see if they might come into the village, &c., &c.

tected a band of European fugitives some thirty in number, among whom was Mr. Ford, the Collector of Gurgáon. To do this within forty miles of the centre of rebellion and within reach of two days easy march of the mutineers' cavalry at Delhi, showed an unswerving loyalty which was conspicuously noted at the time, and generously rewarded after the re-establishment of order. Government presented the *risáldár* with a dress of honour, and a splendidly engraved and jewelled sword valued at Rs. 1,000, and also gave him the perpetual *jágír* of his village, Mohinah, which is assessed at Rs. 5,450.

Chapter II.

History.

Noble exceptions to the general disloyalty.

Another instance of courageous humanity, which was no doubt founded on, and intensified by, a personal liking for the officer concerned, was the help given by the *zamíndárs* of Isápúr, or Ishákpúr, in the Delhi Dábar, to the wife and children of Mr. Nunn, Assistant Patrol in the Customs Department. For three months the *zamíndárs* of the village hid them in their houses and fed them on their own food; and this notwithstanding the known mutinous disposition of the Nawáb of Jhajjar, in whose territory Isápur then was. The reward here was ten *biswas* (or half) of the village Bákargarh adjoining, whose *zamíndárs* had set fire to a Government bungalow, and were punished accordingly. Besides this Rs. 200 *inám* was granted out of the *jama* of Bákargarh, and a pension of Rs. 100 each given to the four *lambardárs*. One of them has now been made a *zaildár* (Khushálí or Khushí Rám.)

Other cases of services more or less meritorious were, those of Bhúre Khán of Kalálí Bágh, who helped and sheltered Sir John Metcalfe in his flight to Jaipur; the *zamíndárs* of Rohat who sheltered and helped on their way to Karnál a company of English fugitives; and the Kailánah men higher up who did the same good office. In a garden at Kailánah is the grave of a little child of Captain Fraser, Bengal Engineers, who died during that terrible flight in the May heat. On the eastern side there are sadly interesting traces of another party who must have escaped one by one from the flagstaff-tower on the 11th. The first place marked is Pallah, in the Delhi *tahsíl*, some 15 miles north-east of the city, where Mrs. Peile, travelling by herself alone, and apparently on foot, got shelter, protection and assistance on her way north. Perhaps here, or a little further away, she met her wounded husband, Lieutenant F. Peile of the 38th Light Infantry, and together with Dr. and Mrs. Wood, and Major Patterson, they got help from Hardiál, a *lambardár* of Murshidpur, taking them on to Larsauli whence they succeeded in escaping to Karnál. The *lambardár* has a certificate from Captain Peile, dated Delhi, January 1867.

General disaffection and its punishment.

Yet on the whole, of course the dark side predominated. The district generally appears to have been mutinous, and certainly got sharply punished. The Gujar *chaukidárs* of Chandrawal

This is not quite in accordance with fact, for the Europeans were not badly provided with arms, and were not so destitute as is here said. They had tried the Chhansa ferry in vain, as they were menaced by mutineers on the other side, and the Rájpút villagers on this side were also disaffected and obstructive. They were recommended to come back to Mohinah by Náráyan Singh, a trooper of the 12th Irregular Cavalry.

Chapter II.

History.

General disaffection and its punishment.

burnt the civil station, and the hill Gujars broke out thieving, plundering, and, wherever they could, burning Government property. For a time disorder was rampant. But it was very short-lived; all the north part of the district was overawed by the presence of the camp on 'the Ridge,' and supplies were obtained through friendly *zamíndárs* without much difficulty. Nothing is more surprising in a small way, among the big events of that time, than the ease and rapidity with which things were settled again after the fall of Delhi. The revenue due in June 1857 was partially collected, and that due in December in full. This re-establishment of order, it may be imagined, was not effected without sharp measures. The special commission appointed for the summary punishment of offenders convicted 2,025 persons, acquitting 1,281. Of the convicts, 392 were hanged, 57 were sentenced to life imprisonment, and many more to imprisonment for shorter terms. Nor can these figures be thought to show all the punishment inflicted. The official report itself says: "It is difficult to analyse all that may have been done during that period of excitement." And there is no doubt that, though hardly anything could be too severe a retribution for the diabolical acts of cruelty that we read of, or hear of, as having been perpetrated by the mutineers and their sympathisers, the Delhi district received a lesson which will never be forgotten.* As was officially said "the agrestic population had been taught to know their masters," while the city retained only one-fourth of its former population. The king himself was tried by a special commission in his own Hall of Audience, and was convicted of rebellion against the British Government, and of being accessory to "the slaughter of 49 Christians, chiefly women and children, within his palace-walls." In January 1858 a general disarming of the people took place; penal fines were levied from offending villages; and the political punishment was pronounced of transfer to the Panjab. By Act XXXVIII of 1858 the imperial city was annexed as a provincial town to the frontier province, and the firm hands of the Chief Commissioner assumed charge of the Delhi territory, which he had done so much to reconquer from the mutineers. The civil Courts re-opened in July 1858.

Famines.

A note of past years of scarcity may conveniently be made here. These, as known by tradition, or reported by different authorities, are the years A.D. 1345, 1631, 1661, 1739, 1770, 1783-84, 1803-4, 1813-14, 1819, 1825-26, 1827-28, 1832-34, 1837-38, 1860-61, 1865, 1868, and 1877. Of these the worst are said to havebeen 1783-84, 1803-4, 1837-38, and 1860-61. Perhaps this is said because there

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* It is not a common thing perhaps to meet a man shot for mutiny in 1857. Yet there is, or till very lately was, one in the village of Khor Panjáb, in the Delhi Bángar. The villagers had sent a *khidmatgár* of Sir J. Metcalfe's, who came to them for concealment, into Delhi to be given up to the king. This was base no doubt, and so thought the English authorities. There is a spot pointed out where 20 or 21 of the *zamíndárs* were stood up in a line and shot down one after another. Our friend was shot in his turn and tumbled down, no doubt thinking himself dead. Yet after the departure of the executioners he found he was only badly wounded, and managed to recover and live these many years.

Chapter II.

History.

Famines.

is a more commonly known tradition of these years than of others especially of the terrible *chalísa* 1783-84 (Sambat 184.0) But the earlier famines are well-known in histories. Muhammad Tughlak's savage extravagance in his war schemes brought on, it is said, the famine of 1345, wherein men ate each other. Sháh Jahán saw two years of drought, 1629-30, and this induced the scarcity of the following year. Aurangzeb's reign had the famine of 1661 in which, in spite of the personal exertions of the Emperor, multitudes perished, and at least as many at Delhi as in other places (*chirăg ke níche andhera.*) In 1825-26, it is said, there was great drought in Delhi ? out of a revenue demand of Rs. 28,72,272, the balances were Rs. 10,59,212. In the northern division of the territory a whole year's revenue was remitted, and in the western division there was considerable distress. Suffering again occurred in 1832-33, while in 1837-38 bread-riots came into fashion, and unlimited relief was ordered for those who would work. In Pánipat alone Rs. 26,000 revenue was remitted, and elsewhere no doubt in proportion. This trouble was put an end to by rain in February 1838. The events of the post-mutiny famines are fresh and well known; in 1860-61 a system of large earth works was started for the employment of sufferers, chiefly in the Ballabgarh *tahsíl.* Some of these works have fallen out of repair, while others have been rendered useless by the construction of the Agra Canal.

Development since annexation.

Some conception of the development of the district since it came into our hands may be gathered from Table No. II, which gives some of the leading statistics for five-yearly periods, so far as they are available; while most of the other tables appended to this work give comparative figures for the last few years. In the case of Table No. II, it is probable that the figures are not always strictly comparable, their basis not being the same in all cases from one period to another. But the figures may be accepted as showing in general terms the nature and extent of the advance made.

District officers since annexation.

The following table shows the several officers who have successively held charge of the district since annexation :—

Name.	From		To	
Mr W. Clifford	14th September	1857	30th September	1857
Sir Theophilus Metcalfe	1st October	1857	22nd November	1857
Mr. P. H Egerton	23rd November	1857	20th March	1860
Mr. W. C. Plowden	21st March	1860	30th April	1860
Mr. F. H Cooper	1st May	1860	26th October	1861
Lieut. F C. Bewsher	27th October	1861	14th November	1861
Major Stuart Graham	15th November	1861	16th February	1862
Mr. F. H. Cooper	17th February	1862	11th May	1863
Mr. T. H. Thornton	12th May	1863	2nd October	1863
Mr. F. H. Cooper	3rd October	1863	13th December	1863
Mr. T. H. Thornton	14th December	1863	27th May	1864
Mr. D Fitzpatrick	27th May	1864	28th June	1864
Mr. T. H. Thornton	29th June	1864	28th September	1864
Mr. W. H. Rattigan	28th September	1864	3rd October	1864
Mr. D. Fitzpatrick	3rd October	1864	9th October	1864
Captain C. A. MacMahon	10th October	1864	2nd September	1865
Lieut. A. Harcourt	2nd September	1865	2nd October	1865
Captain C. A. MacMahon	3rd October	1865	1st September	1866
Mr. T. W. Smyth	2nd September	1866	1st October	1866
Captain C. A. MacMahon	2nd October	1866	22nd February	1867
Mr. D. Fitzpatrick	22nd February	1867	4th November	1868
Major C. A. MacMahon	5th November	1868	5th September	1870
Mr. A. W. Stogdon	6th September	1870	20th October	1870
Major C. A. MacMahon	21st October	1870	1st June	1871

Chapter II.

History.

District officers since annexation.

Name.	From	To
Mr. G. Knox	2nd June 1871	29th February 1872
Mr. A. H. Benton	1st March 1872	26th March 1872
Major R. T. M. Lang	27th March 1872	27th May 1872
Mr. G. Knox	28th May 1872	10th December 1872
Major C. A. MacMahon]	11th December 1872	22nd February 1873
Mr. W. M. Young	23rd February 1873	11th March 1873
Lt.-Colonel R. Young	12th March 1873	15th June 1873
Major Jas. Tighe	16th June 1873	15th January 1874
Mr. J. Frizelle	16th January 1874	13th November 1874
Mr. T. W. Smyth	14th November 1874	5th May 1875
Mr. G. L. Smyth	6th May 1875	13th May 1875
Mr. T. W. Smyth	14th May 1875	19th August 1875
Mr. J. Frizelle	20th August 1875	30th September 1875
Mr T. W. Smyth	1st October 1875	31st August 1876
Captain C. H. T. Marshall	1st September 1876	30th September 1876
Mr. T. W. Smyth	1st October 1876	14th August 1877
Mr. A. W. Stogdon	15th August 1877	14th October 1877
Mr. T. W. Smyth	15th October 1877	15th April 1878
Mr. D. G. Barkley	16th April 1878	22nd April 1878
Mr George Smyth	23rd April 1878	13th August 1878
Lt.-Colonel F. M. Birch	14th August 1878	11th November 1878
Mr, G. Smyth	12th November 1878	1st September 1879
Mr. J. R. Maconachie	2nd September 1879	29th September 1879
Mr. G. Smyth	30th September 1879	14th November 1880
Mr. T. W. Smyth	15th November 1880	31st January 1882
Mr. G. Smyth	1st February 1882	23rd March 1882
Major A. S. Roberts	24th March 1882	18th April 1882
Mr. J. R. Drummond	19th April 1882	20th April 1882
Mr. T. W. Smyth	21st April 1882	17th July 1882
Mr. A. W. Stogdon	18th July 1882	6th October 1882
Mr T. Troward	7th October 1882	17th December 1882
Mr. T. W. Smyth	18th December 1882	6th April 1883
Mr. G. Smyth	7th April 1883	9th October 1883
Major W. J. Parker	10th October 1883	17th October 1883
Mr. J. W. Gardiner	18th October 1883	9th November 1883
Mr. G. Smyth	10th November 1883	Still in charge.

CHAPTER III.

THE PEOPLE.

SECTION A.—STATISTICAL.

Distribution of population.

Table No. V gives separate statistics for each *tahsíl* and for the whole district, of the distribution of population over towns and villages, over area, and among houses and families, while the number of houses in each town is shown in Table No. XLIII. The statistics for the district as a whole give the following figures. Further information will be found in Chapter II of the Census Report of 1881:—

Percentage of total population who live in villages ...		Persons	68·34
		Males	68·43
		Females... ..	68·23
Average rural population per village ...		... ...	632
Average total population per village and town		... ...	918
Number of villages per 100 square miles...		... ...	55
Average distance from village to village, in miles		... ...	1·45
Density of population per square mile of ...	Total area ...	Total population ...	504
		Rural population ...	345
	Cultivated area	Total population ...	784
		Rural population ...	536
	Culturable area	Total population ...	615
		Rural population ...	420
Number of resident families per occupied house		Villages ..	1·88
		Towns ..	2·03
Number of persons per occupied house ...		Villages ...	8·55
		Towns ...	9·29
Number of persons per resident family ...		Villages ...	4·54
		Towns ...	4·57

Among the 701 villages, the size varies greatly, from the huge estates* in Sunípat yielding several thousands of rupees revenue, to the petty hamlets near the city and in the north of Ballabgarh, paying only Rs. 50 or 60 yearly into the Treasury. The population varies accordingly: the average village will have an extent of about 991 acres, a population of 632, and pay something over a thousand rupees revenue. This fact stamps the district as much more akin in these points to the thickly inhabited and heavily assessed parts of the North-West Provinces than to the less fully developed tracts of the Punjab, where the incidence of the revenue is considerably lighter, and the square mile numbers far fewer inhabitants. A glance at the map will show that small towns are so distributed as to form almost everywhere a market not far distant in any case from any, even the

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* The estate of Bhatgáon, which has been now assessed at Rs. 6,000 (dry *jama*) used to pay at one time Rs. 15,000, including that part of the revenue which is called owner's rate.

Chapter III, A.

Statistical.

Distribution of population.

most retired hamlet; and where there seems a comparative want of such a market, it will generally be found that the average size of the villages themselves is very comfortable. In the point of distribution of numbers then the district is fairly well-off, though, as might be expected, the thickest swarm of human beings is found in the carefully cultivated plains of the Khadar riverain, or in the still productive lands of the canal villages. The population of the hills is naturally sparse.

Migration and birthplace of population.

Table No. VI shows the principal districts and states with which the district has exchanged population, the number of emigrants in each direction, and the distribution of immigrants by *tahsíls*. Further details will be found in Table XI, and in supplementary Tables C to H of the Census Report for 1881, while the whole subject is discussed at length in Part II of Chapter III of the same Report. The total gain and loss to the district by migration is shown in the margin. The total number of residents born out of the district is 149,666, of whom 61,037 are males and 88,629 females. The number of people born in the district and living in other parts of the Panjáb is 109,992, of whom 43,643 are males and 66,349 females. The figures below show the general distribution of the population by birthplace:—

Proportion per mille of total population.	Gain.	Loss.
Persons ...	232	171
Males ..	177	127
Females ...	295	222

Born in	Proportion per mille of resident population.								
	Rural Population.			Urban Population.			Total Population.		
	Males.	Females	Persons	Males.	Females	Persons	Males.	Females	Persons.
The District ...	876	691	789	713	734	723	824	705	768
The Province ...	946	891	920	805	820	813	902	868	886
India	1,000	1,000	1,000	997	999	999	999	1,000	999
Asia	1,000	1,000	1,000	998	999	999	999	1,000	999

The following remarks on the migration to and from Dehli are taken from the Census Report:—

"The amount of immigration is exceedingly large in proportion to the population. The attractions exercised by a great centre of commerce swells its amount, but the low percentage of males, and the fact that the proportion of people born in the district, and even in the Panjáb, is smaller among females than among males, show how largely the migration, at any rate between Delhi and the districts and provinces which border on it, is reciprocal. The percentage of males is highest in Hissár, Ambálah, Lahore and the Native States, none of which march with Delhi. It is also high among the immigrants from Rájpútana, which would seem to show that some of them had been driven to the river banks by scarcity of water and grass, or were perhaps engaged on the works of the new canal. Males are more numerous among immigrants than among emigrants, the immigration to a large urban centre always showing an excess of males. The excess emigration to Lahore and Ambálah is probably due to the attractions exercised by the provincial capital and the cantonments. Among the districts with which

Migration and birth-place of population.

exchange has been considerable, the emigration has been largest in proportion to immigration in those where density of population is smallest. But the fertility of the riverain and canal-watered tracts of Delhi has caused immigration from largely to exceed emigration into the neighbouring districts, except in the case of Karnál which offers identical attractions; though the extensive emigration into Rohtak is probably due, in part at least, to the ravages of saline efflorescence in many of the canal villages. The immigrants from the N. W. P. include some two or three thousand labourers working upon the new canal."

Increase and decrease of population.

The figures in the statement below show the population of the district, as it stood at the enumerations of 1868 and 1881:—

	Census.	Persons.	Males.	Females	Density per square mile.
Actuals ...	1853	......	......	......	487
	1868	621,565	333,192	288,373	496
	1881	643,515	344,016	299,499	504
Percentages	1868 on 1853 ...	......	......	......	102
	1881 on 1868 ...	103·53	103·25	103·86	102

Unfortunately, the boundaries of the district have changed so much since the Census of 1853, that it is impossible to compare the figures; but the density of population as then ascertained probably did not differ much over the two areas. It will be seen that the annual increase of population per 10,000 since 1868 has been 25 for males, 26 for females, and 27 for persons, at which rate the male population would be doubled in 281·9 years, the female in 238·0 years, and the total population in 259·7 years. Supposing the same rate of increase to hold good for the next ten years, the population for each year would be in hundreds as shown in the margin.

Year.	Persons.	Males.	Females.
1881 ...	643,5	344,0	299,5
1882 ...	645,2	344,9	300,4
1883 ...	647,0	345,7	301,3
1884 ..	648.7	346,6	302,1
1885 ...	650,4	347,4	303,0
1886 ...	652,2	348,3	393,9
1887 ...	653,9	349,1	304,8
1888 ...	655,7	350,0	305,7
1889 ...	657,4	350,9	306,6
1890 ...	659,2	351,7	307,5
1891 ...	660,9	352,6	308,4

Nor is it improbable that the rate of increase will be sustained. Part of the increase is probably due to increased accuracy of enumeration at each successive enumeration, a good test of which is afforded by the percentage of males to persons, which was 54·30 in 1853, 53·60 in 1868 and 53·46 in 1881. Part again is due to gain by migration, as already shown at page 34. But the rate of increase is moderate; it has been reduced by mortality on the canal, which it is hoped that the realignment now in progress will diminish; and the population will probably continue to increase. The increase in urban population since 1868 has been far larger than that in rural population, the numbers living in 1881 for every 100 living in 1868 being 110 for urban, and 104 for total population. This is due to the great expansion of Dehli as a commercial centre, stimulated by the extension of railway communications. The populations of

Chapter III, A.

Statistical.

Increase and decrease of population.

individual towns at the respective enumerations are shown under their several headings in Chapter VI.

Tahsíl.	Total Population.		Percentage of population of 1881 on that of 1868.
	1868.	1881.	
Dehli ...	298,247	317,802	109
Sunípat ...	193,339	186,835	97
Ballabgarh ...	130,095	138,878	107
*Total district ...	621,681	643,515	104

*These figures do not agree with the published figures of the Census Report of 1868 for the whole district. They are taken from the registers in the District Office, and are the best figures now available.

Within the district the increase of population since 1868 for the various *tahsíls* is shown in the margin.

Mr. Maconachie in his Settlement Report gives the following interesting figures for the separate tracts included in the district.

Year.	Total population.	Bángar population.	Khádar population.	Agriculturists.	Non-agriculturists.	Bángar agriculturists.	Khádar agriculturists.	Bángar non-agriculturists.	Khádar non-agriculturists.
1842	1,12,271	71,586	40,685	61,709	50,562	38,353	23,356	33,233	17,329
1854	1,29,871	81,990	47,881	72,643	57,228	44,161	28,482	37,829	19,399
Per cent. increase on population of 1842 since 1842 ...	15·67	14·53	17·68	17·72	13·18	15·14	21·95	13 83	11·95
1868	1,67,897	1,07,165	60,732	89,425	78,472	55,445	33,980	51,720	26,752
Per cent. increase on population of 1842 since 1854 ...	33·83	35·17	31·59	27·19	42·01	29·42	23 54	41·8	42·43
Total per cent. increase on population of 1842 since 1842	49·5	49·7	49·25	44·91	55·19	44·56	45·49	55·63	54·53

Increase in rural population comparatively small.

In his Census Report for 1881 the Deputy Commissioner writes as follows regarding the increase and decrease of population:—

Mortality on the W. J. Canal.

"The total increase in the rural population is less than one per cent. which contrasts unfavourably with the rate of increase in the town population, where it is as high as 10·4 per cent.

"The decrease in the rural population of the Sunípat *tahsíl* is attributed to the presence of the W. J. Canal and to defective drainage. In Ballabgarh *tahsíl*, where there is little or no canal irrigation, the population has increased by 8·5 per cent., while in Delhi, where the canal runs through a portion only of the *tahsíl*, the population is stationary, the increase in the more healthy tracts being probably balanced by the decrease in the tract traversed by the canal. In the Sunípat *tahsíl* the canal runs through the entire length of the *tahsil* from north to south, and there its effect is most marked. While the decrease in the Sunipat *tahsil* generally amounts to 4·9 per cent, it is much higher in villages bordering on the canal. In some of these the decrease is very marked, as for instance in the table at the top of next page.

Special Census in Canal Villages.

"With the view of ascertaining the effect of the W. J. Canal on the health of persons residing in its vicinity, a Census of 25 villages in the Sunípat *tahsíl* bordering on the canal was taken in 1877. The

Chapter III, A.

Statistical.

Mortality on the W. J. Canal.

	1868.	1881.	Decrease,
Dábarpur ...	590	363	38 per cent.
Khizarpur Tát ...	441	295	33 "
Kherí Dya ...	793	549	31 "
Anandpur ...	354	244	31 "
Salemsar Májrah ...	1,747	1,243	28·8 "
Khubru ...	1,777	1,268	28·6 "
Karion ...	892	636	28·6 "
Sya Khera ...	750	542	27·7 "
Balli Kutabpur ...	1,641	1,237	24·6 "
Sirdhanah ...	861	707	17 8 "
Purkhas ...	3,609	2,967	17·7 "
Jharaut ...	648	536	17·2 "
Salaulí ...	1,915	766	16·3 "
Jataulah ..	709	590	16·7 "
Hulaheri ...	994	845	15 "
Bhadanah ...	1,338	1,137	15 "
Thanah Khurd ...	1,216	983	19 "
Bajanah Khurd ...	1,610	1,368	15 "
Bajnah Kalana ...	1.335	1,170	12·3 "
Khylanah ...	1,166	1,027	11 9 "
Bádsháhpur ...	454	405	10·4 "
Jharauti ...	541	487	10 "

subjoined table shows the population of these villages in that year compared with the returns of 1868 and 1881:—

No.	Name of Village.	1868.	1877	1881.
1	Tájpur	534	419	491
2	Bhatgáon	3,976	4.442	4,068
3	Barwasni	2,167	1,895	1,993
4	Dábarpur	590	456	363
5	Nahura	1,683	1,646	1,777
6	Hulaheri	994	894	845
7	Garhi Brahminan	532	545	541
8	Bádshhápur	454	377	405
9	Jhajji	525	581	517
10	Kakrohí	2,381	2.109	2,328
11	Juan	2,893	3,039	2,692
12	Satauli	915	835	766
13	Chitanah	927	835	891
14	Kheri Daya	793	636	549
15	Balana Jafrabad	405	476	461
16	Khizarpur Jat	441	409	295
17	Mailanah	1,379	1,151	1,243
18	Kareon	892	756	636
19	Hassanyarpur	367	405	357
20	Bhagru	723	703	660
21	Jharauli	541	514	487
22	Anandpur	354	287	244
23	Bhadanah	1,338	1,233	1,137
24	Jharaut	648	579	536
25	Rohat	2,841	2,761	2,818
	Total	29,293	27,983	27,100

From this table, it appears that, during the nine years between 1868 and 1877, the population of these villages decreased from 29,085 to 27,983 or by 4·4 per cent ; and in the next four years that is, between 1877 and 1881, there was a further decrease to 27,100, or of 3·1 per cent., making a total decrease of 7·5 in 13 years. There was an increase of population in four out of the 25 villages ; but the increase was, with one exception, small compared with the decrease in the remaining villages. After making allow-

Chapter III, A.

Statistical.

Special Census in Canal Villages.

ance for the transfer of villages and the changes of boundaries, there has been an increase of 32,946 acres or of 6·7 per cent. in the cultivated area; the increase is largest in the Ballabgarh *tahsíl*."

On the same subject Mr. Maconachie writes thus in 1880:

"The latest figures for the district generally are those of 1868; but for 21 canal villages in Sunípat, a Census was taken in 1877. Its object was primarily for sanitary statistics, but the figures are useful as showing what the canal, when misused, can do in the way of destroying human life. Their force cannot be properly understood unless they are compared so far as they may be with the population statistics of the *tahsíl*, which have just been given, and show a very large increase of population indeed. There is no reason whatever to suppose that since 1868 the general condition of the *tahsíl* will be found to have stopped increase of population altogether, though the rate of increase may have been retarded. But look at the facts in these canal villages: there is an absolute decrease of population: this decrease in such parts is quite as significant as is the general increase in the *tahsíl* taken as a whole; the figures are these:—

Year.	Total population.	Agriculturists.	Non-agriculturists.
1842	18,118	10,376	7,742
1854	20,437	11.690	8,747
Per cent. increase on population of 1842 since 1842 ...	12·79	12·66	12·98
1868	26,941	13,898	13,043
Per cent. increase on population of 1842 since 1854 ...	35·89	21·28	55·49
1877	25,768	13,388	12,380
Per cent. increase on population of 1842 since 1868 ...	6·46	4·92	8·56
Total per cent. increase on population of 1842 since 1842	42·22	29·02	59·91

Births and deaths.

Table No. XI shows the total number of births and deaths registered in the district for the five years from 1877 to 1881, and the births for 1880 and 1881, the only two years during which births have been recorded in rural districts. The distribution of the total deaths, and of the deaths from fever for these five years over the twelve months of the year is shown in Tables Nos. XIA. and XIB. The annual birth rates per mille, calculated on the population of 1868, are as shown in the margin.

	1880.	1881.
Males	17	26
Females	14	22
Persons	31	48

The figures below show the annual death rates per mille since 1868, calculated on the population of that year:—

	1868	1869	1870	1871	1872	1873	1874	1875	1876	1877	1878	1879	1880	1881	Average.
Males	19	31	31	30	32	35	29	30	23	27	55	71	35	38	35
Females	20	30	30	28	33	36	30	30	24	26	56	72	32	37	35
Persons	20	30	31	29	32	36	30	30	24	26	55	71	34	38	35

Births and deaths.

The registration is still imperfect, though it is yearly improving but the figures always fall short of the facts, and the fluctuations probably correspond, allowing for a regular increase due to improved registration, fairly closely with the actual fluctuations in the births and deaths. The historical retrospect which forms the first part of Chapter III of the Census Report of 1881, and especially the annual chronicle from 1849 to 1881 which will be found at page 56 of that report, throw some light on the fluctuations. Such further details as to birth and death rates in individual towns as are available will be found in Table No. XLIV, and under the headings of the several towns in Chapter VI.

Age, sex, and civil condition.

The figures for age, sex, and civil condition are given in great detail in Tables IV to VII of the Census Report of 1881, while the numbers of the sexes for each religion will be found in Table No. VII appended to the present work. The age statistics must be taken subject to limitations which will be found fully discussed in Chapter VII of the Census Report. Their value rapidly diminishes as the numbers dealt with become smaller; and it is unnecessary here to give actual figures, or any statistics for *tahsíls*. The following figures show the distribution by age of every 10,000 of the population according to the Census figures :—

	0—1	1—2	2—3	3—4	4—5	0—5	5—10	10—15	15—20
Persons	301	149	143	204	226	1,023	1,214	1,210	984
Males	286	146	139	191	227	989	1,215	1,276	988
Females... ...	318	153	148	217	227	1,063	1,212	1,133	979

	20—25	25—30	30—35	35—40	40—45	45—50	50—55	55—60	over 60
Persons	1,034	940	876	481	705	330	542	144	516
Males	1,013	952	881	503	677	345	518	156	486
Females... ...	1,058	926	871	457	737	313	570	129	552

Population.		Villages.	Towns.	Total.
All religions	1855	...	...	5,430
	1868	...	...	5,360
	1881	5,353	5,330	5,346
Hindus ...	1881	5.358	5,455	5.380
Jains ...	1881	5.356	5,120	5.228
Musalmans ...	1881	5,322	5,108	5,202
Christians ...	1881	...	6,543	6,569

The number of males among every 10,000 of both sexes is shown in the margin. The decrease at each successive enumeration is almost certainly due to greater accuracy of enumeration. In the Census of 1881, the number of females per 1,000 males in the earlier years of life was found to be as shown in next margin.

Year of life.	All religions.	Hindus.	Musalmans.
0 - 1	968	958	1,002
1—2	911	902	932
2—3	923	895	1,025
3—4	988	...	...
4—5	872	...	...

The figures for civil condition are given in Table No. X, which shows the actual number of single, married, and widowed for each sex in each religion, and also the distribution by civil condition of the total number of each sex in each age-period. The Deputy Commissioner wrote as follows in his Census Report for the district :—

"It is customary among Hindus to marry their children at an early age. Girls are usually married between the ages of 7 and 13, and boys

Chapter III, A.

Statistical.

Infanticide.

between the ages of 9 and 15. If the parents are in good circumstances their children are married at even earlier ages than the above. The ceremony of betrothal precedes the marriage by two or three years. The age of marriage is considerably later among Muhammadans.

"Rajpúts and Gújars among Hindus, and Meos and Patháns among Muhammadans, were formerly suspected of practising female infanticide, but it is believed that this crime has now ceased to exist. There is not much to say as to the treatment of female children. They are not, as a rule, ill-treated, but they do not receive the same care and attention as sons, especially among Hindus. Muhammadans treat their daughters with the same care as their sons. Up to 5 years of age the disproportion between the numbers of the sexes is not so great as at a later age. The disproportion increases as the age increases, and it is possible that this is due to greater mortality among the females, either as the result of neglect or of disease. Females being naturally weaker than males are less able to resist the ailments of childhood, and they die in greater numbers.

Disparity of the sexes.

"The majority of the Sikh and Christian population in this district are on service in the British or Native Regiments stationed at Delhi, and this explains the great disparity of the sexes in these two divisions, as a comparatively small proportion of the soldiers are married or have their families with them. Among Muhammadans the proportion of females is larger than among Hindus. To every 100 Muhammadan males there are 92·2 females; whereas there are only 85·5 females to every 100 Hindu males. Comparing the chief of Muhammadan tribes the one with the other the results are :—

	Males.	*Females.*
Patháns	100	92·8
Sheikhs	100	93·3
Syads	100	99·8
Mughals	100	101·1

"In three other sub-divisions of Muhammadans the proportion of females is even larger; thus :—

	Males.	*Females.*
Bilochis	100	103·4
Kassábs	100	105·4
Mirásis	100	103·2

"The exceptionally high proportion of females in these three classes is more apparent than real, and is probably due to the occupation of the men, which necessitates their absence from home for long periods at a time, Mirásis earn their livelihood chiefly by begging from village to village. Bilochis are largely employed as camel drivers, and Kassábs are chiefly engaged in trading in cattle and grain. Among Hindús, the only class in which there is an appreach to equality between males and females is Saráogis. Among these the proportion of males to females is as 52·28 to 47·72, that is, for every 100 male Saráogis there are 91·2 females; but in the towns of Delhi and Sunípat this proportion is exceeded. In these the proportions are :—

	Males.	*Females.*
Delhi	100	93
Sunípat	100	103

Causes of disparity of sexes.

"Two causes may be assigned for the differences in the proportion of females to males among Hindus and Muhammadans respectively: 1st, that more females than males are born to Muhammadans than to Hindus; and 2ndly, that a higher rate of mortality obtains among Hindu females owing (*a*) to their being less carefully reared in childhood than males, and (*b*) owing to the system of early marriages. Thus the proportion of girls

under one year to boys among Muhammadans is as 100 to 99·8, whereas among Hindus the proportion is as 100 to 104·3, thus showing either that fewer females than males are born in Hindu families, or that the mortality among female children under one year is greater among Hindus than among Muhammadans. Again Hindu women marry at an earlier age, as a rule, than Muhammadan women, and they do not live to so great an age. The one is probably the result of the other."

Infirmities.

Table No. XII shows the number of insane, blind, deaf-mutes and lepers in the district in each religion. The proportions per 10,000 of either sex for each of these infirmities are shown in the margin. Tables Nos. XIV to XVII of the Census Report for 1881 give further details of the age and religion of the infirm.

Infirmity.	Males.	Females.
Insane ...	4	2
Blind ...	44	57
Deaf and dumb ...	5	4
Leprous ...	5	2

European and Eurasian population.

The figures given below show the composition of the Christian population, and the respective numbers who returned their birth-place and their language as European. They are taken from Tables IIIA, IX and XI of the Census Report for 1881:—

Details.		Males.	Females.	Persons.
Races of Christian Population.	Europeans and Americans ...	748	241	989
	Eurasians	46	68	114
	Native Christians	531	383	914
	Total Christians ...	1,325	692	2,017
Language.	English	763	269	1,032
	Other European languages ...	9	4	13
	Total European languages ...	772	273	1,045
Birth-place.	British Isles	151	64	215
	Other European countries ...	20	4	24
	Total European countries ...	171	68	239

But the figures for the races of Christians, which are discussed in Part VII of Chapter IV of the Census Report, are very untrustworthy; and it is certain that many who were really Eurasians returned themselves as Europeans. The figures for European birth-place are also incomplete, as many Europeans made entries, probably names of villages and the like, which, though they were almost certainly English, could not be identified, and were therefore classed as "doubtful and unspecified." The number of troops stationed in the district is given in Chap. V, and the distribution of European and Eurasian Christians by *tahsíls* is shown in Table No. VII.

SECTION B.—SOCIAL LIFE.

The village.

Mr. Maconachie thus describes the village of the Delhi district: "Nothing is pleasanter, of its kind, than to walk through a well-cultivated Ját village, in the early morning, say in the middle or latter end of

Chapter III, B.
Social Life.
The village.

March. The season, if it has been a fairly favourable one, has started the *rabí* crops with a decently heavy winter rain (*maháwat*), about the end of December; but, since then there has been fair weather, with a bright sun, and gentle west wind, and the first watering (*korwa*) has done its work, and brought on the crops to that stage when they want moisture again. The fields round the village are masses of green, interspersed here and there with lines of the yellow mustard flower; near the houses the crops look darker than the others, and have a stronger growth, telling of thickly-laid manure. The wells are frequent and close, and their elevated platform enables the eye to pick them out at once in the landscape and calculate roughly how much land lies under each. On every side the oxen are moving up and down the pretty long slope leading to the hollow which is dug out so as to give them a better purchase on the ground in making the pull to raise the water; the voices of men and boys at close intervals fill the air with the musical cry made when the *charsá* is being heaved up at the top of the pull. Streams of water trickling silently along the narrow carefully earthed-up irrigation channels tell that busy work is going on, and here and there a barefooted Ját is alternately opening up and closing the little beds (*kiárí*), which all careful cultivators use, so as to economise the precious fluid. Spare yoke of oxen stand lazily eating straw at the mud-built manger; trees, sprinkled here and there, give at once variety and shade to the scene, which to one interested in the people is very pleasing. Several hundred acres are laboriously and finely tilled, and the sweat of the brow earns good bread. The men themselves, as before noted, are of good stature, straight-limbed, and wiry withal. Their voices are baritone, not wanting in a rough melody, and their faces are many of them comely. Draw up to them, and unless they imagine that anything is to be got by whining, their talk will show them fairly well-to-do, and contented."

Houses.

There is no great difference in the style of houses of Hindus and Muhammadans. The main thing that causes variations is the pecuniary condition of the house-holders. The best way of noting the different parts of the *zamindár's* dwelling will be to give a rough description of a sample house belonging to a well-to-do Ját. In the village main street, its front will be a blank wall some ten or twelve feet high, with a door somewhere about the middle. Turn in here and you find yourself in the *dahlij* (or *dahlíj*), which is a kind of porch; it is also called *deorhi*, as in parts of the Panjab. This is roofed with rough wooden rafters (*kari*), and opens on the inner side on the courtyard of the house. If it is deep, it will have supporting pillars (*thamb* or *sitún*), supporting the main cross beam (*shatír*) which runs along its length. In the *dahlij*, horses and cows are fastened up, and the *takht*, a large seat, is often put there handy for a lounge or a meditative pull at the *hukah*. In our friend's house, if you look round to the left, *i.e.*, the north end of the *dahlij*, you will see a *khor* or *thán* or manger put up in the corner. This is generally a box-like erection made of earth; the *thán* for horses is, say, four feet high, the *khor* for cattle lower, either solid, or hollow underneath to admit of an arched recess (*ták*), a convenience which a thrifty *zamíndár* is very fond of, and will always get into walls and spare places when he can. At the right hand end of the *khor* is the *kundi*, a hollow made in the top of the manger for the grain of the animal (when he gets any). The rest of the manger is kept for fodder, and on the outside an edge is made either of wood or earth to prevent

Houses.

the food from falling when tossed about in eating. The inner door of the *dahlíj* is not generally exactly opposite the street door, but on one side, so as to make a screen for the *chauk* where the women and children of the house pass much of their time, and, in the hot weather, sleep; the cattle too stand about in it. Going across the yard, we come to an ante-room or verandah, roofed like the *dahlíz* and leading to inner rooms or *kothas* (also called *obáras*). In the corner of the *dálán*, or in a corner of the inside room, will be the *kothí* or house-granary, made of hard earth well-mixed with chaff and cowdung, and built up very carefully by the women-folk a span height at a time. It looks white and clean, and stands four feet high or more. A good wife will generally adorn her *kothí* with fantastic representations of peacocks, parrots, or other birds, done in chalk or with the red earth (*gerhu*), which is sold in the *bázar:* a big *kothí* will hold 50 maunds of grain, an average one about 30. Its lid is called *pahán*. The cooking of the family is done in the *dálán*, or, as is very often the case, the room at the east end of the north *dálán* will be open to it, and the cook room there (*rasoí*). The rooms, which are here shown at the east end, are the principal rooms of the house. Their chief furniture will be *charpais* or *kát*, one for each member of the family; one or two low stools for the women to sit on (*pídhá*); the cotton spinning wheel (*charkhí*), and the women's clothes box, a wicker basket some two feet high (*patiár*); the men's clothes are kept in a locked box, together with ornaments and papers or other property of value. There is generally too a *chaj* or fan made of reeds, and its joints fastened with leather. For getting on to the roof, which is used for storing *jawár* stalks, and sleeping in the hot weather, there is the *parkálá*, a rough set of steps built up into the inner side of the *dahlíj*. The water for household drinking is kept in an earthen vessel (*paindá* or *matká*) kept in the *rasoi:* it is brought twice daily, morning and evening, by the women from the village well.

Household vessels.

The general name for household vessels is *bartan*, but this means properly anything *used* or *in use* (*bartná—bartáwa*). The earthen vessels collectively are *básan*, and the metal ones *kásan*. Taken separately there is first:—

1.—*Bartná*, of brass (*degchi* for Musalmáns), for cooking *dál* and *khichrí* —of small size—its lid is *dakhní*.

2.—*Tokní*, of brass (*degcha* for Musalmáns) for cooking rice and *dalyá*—large.

3.—*Tokna* (*deg* for Musalmáns), the same but larger.

4.—*Thalí* (*rikabí*), of *kánsí*—a cauldron.

5.—*Bela* or *katora* (*pyálá* for Musalmáns) of brass or *kánsí*—for drinking milk or *sít* (*lassí*)—*katorí*, when of a smaller size.

6.—*Lota* or *banta* (*badna* for Musalmáns), drinking vessels of brass.

7.—*Abkhora*, very small like a tumbler in shape and size—of brass.

8.—*Chamcha*, a brass spoon for stirring the food being cooked.

9.—*Parát* (*tabak* for Musalmáns) of brass, a tray in which the flour is rooled before cooking.

10.—*Bilomini*, or *churn*, an ingenious instrument, which however is well known.

Chapter III, B.
Social Life.

There will, of course, be a grinding mill (*chakki*) to afford the women something to do.

Division of time.

The divisions of time or hours of the day are as follows :—

(1).—*Pasar*	...	= 4 *gharís* before break of day.
(2).—*Píli phathi* or *tarke*	...	= The bursting of the yellow dawn.
(3).—*Bási ká wakt*	...	= Time of taking the early morning meal, *choti hazirí*.
(4).—*Kalewar*	...	= Time of the morning meal.
(5).—*Dopahar din*	...	= Noon.
(6).—*Dhalá huá din*	...	= 1½ or 2 P.M.
(7).—*Tisra pahar*	...	= About 3 P.M.
(8).—*Pichla pahar*	...	= From then to sundown.
(9).—*Hándían ká wakt* or *Dhoráneká wakt*	...	= A *gharí* or ½ a *gharí* after sunset.
(10).—*Pahar rát gaya*	...	= about 9 P.M.
(11).—*Sota*	...	= Sleeping time.
(12).—*Adhí rát*	...	= Midnight.
(13).—*Paharka tarka*	...	= A *pahar* short of dawn.

The local names of the days of the week are, beginning with Monday, *Somwár*, *Mangal*, *Budh*, *Brihaspat*, *Sukr*, *Saníchar*, *Aitwár*, and the word for these is *bár* (Panjabi *wár* or *vár*.) The day of the month is *tith*, the month being, as usual, divided into two periods of fifteen days each (*pandrawára*), the fortnight while the moon is crescent being *sudí*, and the waning time *badi*; the *badi* is reckoned as the first. Once in three years comes the intercalary month, *laund*, which, when it comes in *Sáwan*, *Bhádon*, *Kátak* or *Mágh*, is reputed to bring a famine with it, as affirmed in the lines :—

"In the year with two months *Sáwan*, *Bhádon*, *Kátak*, or *Mágh*, go an sell your gold ornaments and buy grain."

Food.

The main food of the *zamíndár* is, of course, grain, wheat and *channa*; *jowár*, *makkai*, *bájrá* with milk and *ghí*; rice, if he is above the average in means. In the cold weather, beginning with *Kátik* or *Mangsar*, he will eat *jowár* or *makkai*, mixing with it green food made of mustard leaf or cabbage. In *Chait* or even *Phágan*, the *jowár* is changed for wheat; or, if the man is poor, he must eat barley bread. *Bájrá* bread is good for the cold weather.

Meals are taken twice in the day—in the morning about ten, and in the evening somewhere about seven or eight. If a man, however, has hard work, he eats something* (*bású*) either bread or *khichri* made from *bájrá*, or *dalyá* of *makkai*, or *dalyá* of *jowár*, or *lassi*, (*sít* or *chha*) before starting for his work, or half an hour after he has begun it. If he is well-off, he may treat himself to a sweetmeat ball (*ladu*) of *gur*, *til*, and wheat meal. This is considered a morning comforter, and very strengthening. His morning meal will be brought by his wife or daughter, or

* *Básí* means stale, but in this sense it includes *sad* (which is strictly speaking fresh cooked food).

some other woman of his family, or a boy; his food being washed down by a drink from the well, or if none is near, a pond, or he may have brought water from his house. The *zamíndár*, be he well-to-do or poor, will generally have green food for part of his daily diet. When this is mixed with meal, he calls it *ság*, and when it is the simple plant boiled in water its name is *bhújí*. This last is made often from the tender plant of the *panwár* (*Cassiá occidentalis*, see Punjab plants, p. 62), but this is only in the beginning of the rains; afterwards, when the fibres of the plant get strong and tough, it becomes unfit for such use.

Gur, when it has to be bought, is eaten as a luxury in the cold weather by men well-to-do; but if a *zamíndár* is making *gur* at his *kohlu*, both he and his family will generally turn the product to domestic use in the different stages of its making. His shivering urchins standing in the frosty air of the early January morning over a smouldering fire near the *gurgoí*, will be nibbling the long stalks (*pachganda*), and the raw juice will be mixed by the good wife with rice (*ras ki khír*), and served up as a savoury dish for the husband at his early morning meal, or mixed with milk it is a warming drink (*tasmei*). Again when the boiling is going on, and the *gur* is nearly made, a favourite comestible is obtained by mixing it with milk, and boiling it to a thin consistency. This, which is called *shíra*, is eaten with bread, much as we eat honey.

Men, women and children eat the same food. The full food for a man is a *ser*; the woman generally as much as the man, and no wonder, for your good Ját wife is by no means a lazy creature or devoid of muscle. When young, she draws water for her family, it being considered a shameful thing that a man should do this office for himself; he will avoid the *chaupál* in taking water home. Young women and old alike spend an hour or two in grinding, early in the morning. Going through the village in the early dawn or dark, very often the only sound is that of the woman's industry at the mill. Five *sérs* is an ordinary task, but if need be she can grind ten.

The general ways of cooking food are: (1) *rotí*; (2) *dalyá*; (3) *khichrí*. The peculiarity of *dalyá*, which is generally made from wheat, *jowár*, *makkai*, is that the grain is bruised rather than ground; it is then thrown into boiling water in a cauldron (*hándí*) and boiled with salt and *dál* of *múng* or *moth*. *Khichrí* is made from *bájrá* mixed with *múng kí dál* and pounded in a mortar; when this is fine it is thrown into a vessel in the same way as *dalyá*, but is cooked longer, and it should be cooked slowly; it should be thick enough to stick on a wall when thrown there. *Dál* is made of *múng*, *moth* and *urd*: the grain used for the purpose is merely split up, not ground. It is considered better to make the bread, one part of *channa* with two of wheat, salt being mixed also; this is called *misí* by *zamindárs*, *besni* in towns. The thick *rotí*, made from wheat alone, is called *páni ki rotì*; the thin, like our (*chapattí*), made after rolling out, is called *phulka* or *mánda*.

The following estimate of the consumption of food by the people was furnished by the district authorities for the Famine Report of 1879 (page 212):—

Chapter III, B.

Social Life.

Food.

Estimate of food grains consumed in a year by an average family of five persons :—

Agriculturists.				Non-Agriculturists and Towns-people.			
Daily.		Yearly.		Daily.		Yearly.	
	Seers.	Grain.	No. of Seers		Seers.	Grain.	No. of Seers.
Man	1¼	Wheat ...	320	Man	¾	Wheat ...	480
Woman	1	Barley ...	320	Woman	⅝	Barley ...	120
Old person	¾	Gram ...	160	Old person	⅝	Gram ...	160
Two children	1	Bájra ...	280	Two children	1	Bájra ...	80
		Maize ...	160			Maize ...	80
Total	4	Jowár ...	120			Jowár ...	40
		Pulses (inferior)	40			Pulses ...	80
		Miscellaneous	40			Miscellaneous	40
			1,440 =36 mds.				1,080 seers =27 mds.

Dress.

The ordinary working dress of the Hindu *zamíndár* is only the *pagri*, the *dhoti* (cloth worn round the loins and middle), and the *kamarí*, a short vest with sleeves. Sometimes he takes the *kamarí* off at work, especially in the hot weather; but he will always wear it when cutting wheat, to save his body moist with perspiration from the dust coming out of the falling sheaves. On occasions of ceremony, however, such as a holiday, at a fair, or a marriage, he will put on a longer coat called *angarkha*, which comes down below the knees, and in the cold weather this is often lined like a *razai* with cotton stuffing. This garment sometimes takes the same pattern too as our *razais*, and then has a rather comical effect; at others it is a gorgeous blue or purple which strikes the eye from a distance. The *chádar* too or cloak is worn across the shoulders over the *angarkha*, and is really the most picturesque part of the *zamindár's* custom. In the cold weather he wears a *razai* wound about him like a cloak (*lihaf—saur*). *Pyjámas*, *i.e.*, trousers tight below the knee and very loose at the hips, are worn by many *lambardárs* and other more luxurious persons. The only difference in the boys' dress, as compared with the man, is that he wears a *langotí* round his middle instead of the *dhoti*, which is a ssumed when the boy is changing into the young man at 17 or 18years of age. The women wear the *gagra* (also called *tukri* or *las nga*), or loose drawers; the *angi*, a short-sleeved vest which cover the breast but leaves the chest partly bare and the abdomen wholly so : and the *orhna* or cloak-veil which comes over the head and body too. The *angi* and *orhna* in the case of well-to-do *zamíndárs* are often handsomely made of fine linen.

The Muhammadan *zamíndár* wears the same clothes as the Hindu, and even fastens his *pagri* in the same way, so that it is not always easy to discern one from the other by his appearance : his *kamarí* or *angarkha*, however, is fastened differently, the Hindu

Chapter III, B.

Social Life.

Dress.

fastening on his right side, and the Muhammadan on his left. The Muhammadan women wear tight trousers (*pyjamas*) and in place of the *angi* the *kutni*, which is longer than the other, coming down over the stomach and waist; the chest too is covered. Their costume is completed by the *orhna*, the only difference being in the prevailing colour; a Muhammadan is very fond of blue, the Hindu inclines to saffron. The Muhammadan boy, like his Hindu neighbour, wears a *langoti*, instead of *dhoti*, otherwise he dresses like his father. Shoes are worn by both sexes of all ages, but a *zamíndár* generally finds the bare foot best for a long journey, in which case he carries his shoes in his hand. These shoes are rough and clumsy, being furnished by the village *chamár* who generally gets grain at the harvest as payment for his total services without going into details; if, however, he is paid in cash, the price of a pair of shoes is about 12 annas; if especially good, a rupee. They are made of buffalo, cow or bullock hide (the Hindu not objecting to use the leather in this way), and last about four months: the *zamíndár* generally requires three pairs in the year.

Women's ornaments.

Hindus and Muhammadans alike wear ornaments in the ear and nose, on the forehead and crown of the head, the neck, chest, upper arm, and wrist (*kalaií* or *ponchá*), thumb (*anguthá*) and finger, ankle (*takhna*) and toe (*ungli*). Gold is not worn on the foot, but any of the other ornaments may be made of it if the wearer is rich enough to afford it: for the most part, however, the material is silver; poor people have them of pewter (*rang*) or bell-metal (*kánsí*). The number of the different kinds is very large, but it will be enough to mention those most commonly worn.

(1).—On the crown of the head, on the *chotí*, is worn a silver or bell-metal ornament also called *chotí*. This is not now in fashion among the better *zamíndárs*; the poorer caste still keep it up; a bell-metal *chotí* costs five or six annas; for silver ornaments the price including the making up is, as a rule, Re. 1 per *tola*; Muhammadans have the same name for the *chotí* and use it without any reference to caste.

(2).—On the forehead is *munh ká sáz*, a chain ornament fastened on the top of the head, and coming down on each side round to the ear where it joins the earring. The Muhammadans wear it, and use the name.

(3).—The earring for the Hindu is the *bálí* and for the Muhammadans, *jhúmká*: the shapes of the body of the ornament are slightly different, and the little balls are hung from it in different fashion, the *bálí* having three balls, *gongrú*, in a chain, and the *jhúmká* having no chain, but the ball immediately pendent from the main part. The ear also is differently pierced: the Hindu has a hole in the lobe and in the outer rim at the top; the Muhammadan has some 15 or 20 perforations all the way up the cartilage.

(4).—For the nose there is the *nath*, a name common to Hindus and Muhammadans; it is a ring ornamented with a picture, generally of a parrot for Hindus, or imitation jewels. The Muhammadan wears the imitation jewels, but not pictures.

Chapter III, B.

Social Life.

Women's ornaments.

(5).—On the neck is the *hansla* or *hansli*, the usual horse shoe shape, worn alike by Muhammadans and Hindus.

(6).—On the chest the women wear the *jhálrá*, which may be a rupee or other ornament hung on a string round the neck.

(7).—On the upper arm is the *bázúband*, a jointed ring, and *tádd* ('*d*' pronounced very heavy) a broad plain ring. The Muhammadans wear only the first; Hindus both.

(8).—On the wrist is the *mattí* or *kangní*, worn generally by Hindus only. Sometimes, however, the Muhammadans also wear it. The Muhammadan speciality here is the *naugiri*, a bracelet of nine pieces strung on a string: the *kangní* is all one piece.

(9).—The thumb ring with mirror (*ársí*) is worn alike by Hindus and Muhammadans.

(10).—Finger rings are worn (*anguthi*) on any finger by both classes.

(11).—On the ankle is the *pazeb* (or foot ornament), a ring with pendent balls, alike for Hindus and Muhammadans.

(12).—On the toes there are the *challa* and *bichua* for Hindus. The Muhammadans wear only the first which is plain, while the other has three bars of raised work. The *challa* is worn on any toe, but when the *bichua* is used it occupies the second, third and fourth.

Men's ornaments.

All these are worn by women only—men whether Hindu or Muhammadan wear the following:—

(1)—On the chest the *tora* or *kanthila* made up of five chains with two blocks (*singhára*) where they fasten. The chains hang in front, the blocks settle down on the top of the chest on each side.

(2).—The Hindu may wear a rosary (*mála*) one bead of gold and the next of coral—the Muhammadans do not wear this.

(3).—Both wear the *kare* on the wrist, a plain bracelet, or ornamented it may be with some representation of a lion.

(4).—There is the signet ring (*mohr*) worn by all or rather possessed by all; it is not seldom kept in the *págri*.

(5).—The big toe, whether belonging to a Hindu or Muhammadan, may get a *challa*.

Though these ornaments are said to belong to men, it is not a common thing to see a Hindu *zamíndár* wearing them unless he is a dandy or dissolute fellow. Very few of the better class use them. Boys wear them up to about eighteen and earrings to boot, but leave them off gradually as hair comes on the face. Earrings go first, then the bracelet: the youngster may keep the chest ornament a little longer if he likes, but he will get talked about and perhaps laughed at if he wears ornaments when he has become a father.

Games.

The Ját boys play hockey (*gend khuli*,); but the goals on either side are as wide as the place played on, and not limited to the narrow space of the English game: another game, very much answering to the fine Punjabí game of *pitkaudhi*, is *kabadhi* or touch. The party is divided into two sets each in their base, and when a man is sent by one set, one of the other set goes after him o touch him, and after touching him to get home to his own base.

Chapter III, B.

Social Life.

The other men, however, having been touched, closes with him to prevent this.

Social ceremonies.

At Birth.

When a boy is born, the representation of a hand with outspread fingers is made with *geru* * or *mendi* on the outside wall of the house. Muhammadans use the emblem in *chalk* on occasions of rejoicing, such as I'd and at marriage. The Hindu may make pictures at such times, but he keeps the emblem of the outstretched hand † for a birth, and for a birth of a son, not for a girl. It is called *thápá*. On the sixth day after birth, rejoicing is made in the house by the women, who call in their neighbours of the same sex; sweetmeats are distributed. On the tenth day, among Hindus only, is the *dasutan*, a homely feast; and the ceremony of *hom* is performed, a mixture called *sákal* of rice, *jhi*, *jau*, *til*. sugar, and five fruits, *i.e.* pistachio, cocoanut, large raisins, almonds, dates, is ground up, and a little of it thrown in a fire in the room where the boy is born, and the mother and child are set before it, the room having been 'leeped' and the earthen household vessels being changed. Till all this is done the house is unclean, and as such cannot be entered by neighbours; no one goes into the room in fact except a woman attendant.

Betrothal.

The first great ceremony in life after birth is the betrothal in marriage. This is made usually in very tender years; there is no minimum age. The proceedings are much the same for Játs and Gújars, the Muhammadans following the Hindus with striking similarity. Matters are thus managed. The father or other nearest relative of the girl sends a Brahmin, or a Nai (it does not apparently matter which) out on the search for a suitable match. The Brahmin goes to some friend of his own caste (or the Nai to a brother Nai) and asks for information about a suitable bridegroom. The other will tell him of such and such a boy and get the lad to his house or elsewhere to show him to the messenger, to see that he has no bodily defect, such as lameness, deafness, being one-eyed or the like. The messenger being satisfied goes back to report to the girl's father. Then on a lucky day (*subh-tith*) fixed by the *pandits*, both Nai and Brahmin will go, taking a rupee to the relatives of the girl. If they consent, the betrothal is made forthwith on the day mentioned by the *pandits*. On that day the relatives of the boy are collected, and if the family is one of position, persons of other families living near also. The boy is seated on a low seat (*chaunkí*) covered with cloth; he is handsomely dressed for the occasion. The Brahmin of the girl's family will make a mark (*tíká*) on his forehead with *haldi* (saffron) or *roli* (a mixture of

* *Geru*—see Punjab Products, page 23—is a hard red laminated earth used for dyeing. It is obtained from Dera Gházi Khán. *Mendi* (or *henna*) see Punjab Products, page 348, scientific name *Lawsonia inermis*, is a hedge-like bush, cultivated in gardens for the dye obtained from its leaves.

† After a marriage, however, the bride's mother, when she dismisses her daughter to her husband's house the first time (which is for a few days only), puts her outstretched hand in a vessel of *mendi*, and then marks the breast of the bridegroom's father with it.

Chapter III, B.

Social Life.

Betrothal.

saffron and borax). The Brahmin also gives him a rupee, and places a sweetmeat or some sugar in his mouth. For this service he gets Rs. 4 from the boy's father, while his *confrere*, the barber gets Rs. 3 and it may be an old garment. The friends also join in a feast of *shakar* (molasses,) and the matter is accomplished. The amount of fee slightly varies in different tribes; it is given at the time of dismissal, and is called *bidagi* or *rukhsatáná*. Among the Gaurwas a cocoanut (*náriel*) is given with the rupee to the boy, and this is done also by the Rájpúts, Sainis and some others. The Brahmins follow the proceedings throughout like the Gújars. The Shaikhs say they have only a verbal agreement without any particular ceremony. Meos have slight variations from the Gújars in details, but none of importance. The expense here is almost entirely on the side of the boy's father, who provides the entertaiument for his friends, and the fees for the ceremonial messengers.

Marriage.

Marriage should follow betrothal in the first or third, or fifth subsequent year. The even years are considered unlucky. It is considered disgraceful if a girl is not married by the time she is 15, and it is not the custom to have her married before she is 5. The Játs say they think the girl should always be married by the time she reaches 11 years of age. The boy must be 5, but above this there is no limit as to maximum; he will marry when he can. As a rule, a man has only one wife, but this is a rather the limit of cost than of fancy or custom. A rich man will not seldom take a second wife, while the Meos, and probably all Muhammadans, take two or even three, commonly, if they have the means.

The ceremonial form of marriage.

The first marriage is called by the Játs and other Hindus *shádí*, and it is practised by almost all Hindu tribes in the same way, called *phéré*. The eight forms of the strict Hindu law are unknown. The formalities may be described as follows: Two or two-and-a-half months beforehand, the parents of the girl send intimation that they are willing to have the marriage on a certain day. This intimation is written, and the letter is called *pili chithi*. Then not less than nine and not more than twenty-one days before that day, the Nai and Brahmin go with it to the parents of the boy. The *píli chíthi* is written in *sháshtri* and fixes the hour (between sundown and sunrise), as well as the day of the ceremony. The proceeding is called *lagan*. The parents of the boy come with the marriage procession (*barát*) to the village of the girl, but on arrival outside it halts, and a Nai is sent forward to announce the approach of the party. The halting place of procession is called *khét*. The friends of the bride now come to meet the others, and all go in with music and drums. Money, ornaments, and clothes, according to the means of the family, are presented at *khet*,* and then the bridegroom's party go on to the place in the village prepared for their reception, either a *chaupál*, or other suitable building, or it may be a tent. This place is called *janwása*. The marriage then takes place, and on the third day after its arrival the procession goes back to its own village. The actual ceremony is thus made: A canopy (*mándá*) is erected before the dwelling-rooms of the bride's parents in the courtyard (*chauk*).

* The Játs call *khet*, *gora*.

Chapter III, B.

Social Life.

Under this canopy a fire is lighted on a *chabútra* raised about a foot high and a cubit square. On the *chabútra* fine powdered earth is put, and on this the fuel, which is *dhák* wood, is piled up in regular layers. This preparation of the earth is called *bédhí*. The clothes of the bridegroom are tied to those of the bride, and then she follows him seven times round the fire, the right hand being on the inside. A Brahmin representing each family recites texts and declares the genealogy (*sákháchár*) of the bridegroom and bride back seven generations. The bride and bridegroom have nothing to say. When the turns (*phére*) have been made, the pair are sent inside the house and the women inspect the bridegroom. After this he goes back to his friends, and a feast is given by the bride-party. With the procession the girl goes back too. She remains ten or twenty days in the house of her husband's father, and then returns with a Brahmin or Nai to her parents. When the *barát* first comes there is a peculiar ceremony, the meaning of which, symbolical or otherwise, is not easy to understand. The bridegroom is stood on a *chaunkí* or a stool in front of the bride's house, and a lamp is waved in front of his face in a circle. His friends scatter *paisá* to the poor people of the village. The lamp is waved by one of the bride's women-friends, and the ceremony is called *árth*. She has a tray with a rupee, saffron, and rice on it, and this, with the lamp, she raises and lowers seven times. When this is done, the bridegroom goes to the *janwása*.

The ceremonial form of marriage.

The Meos, a Muhammadan tribe, have of course the *nikáh* of their faith, and do not have any halting at the *khét*. The bridegroom wears the *sérá*, a long necklace of flowers strung on a string, but does not as all Hindus do, in addition to the *séra* wear the paper head-dress called *mohr*. They also, instead of the *lagan*, send a coloured string made up of differently coloured threads, with knots tied in it to show the number of days after its arrival at the boy's home for the date of the marriage. This parti-coloured string is called *kaláwah*, and the proceeding of sending it is *gánth*. The Shaikhs read the *nikáh* in the orthodox way, and so do the other Muhammadan tribes.

Mukláwa.

Nearly all the tribes keep the custom of *mukláwa* or *gona*, which precedes co-habitation. This is the final leave-taking of the bride, and the departure to her husband's home for good. The bridegroom sends notice of his coming to fetch his bride, and on the other side's agreeing he comes with his friends, and the ceremony of *mukláwa* is gone through. The bride's and bridegroom's faces are turned to the east, and they are then seated on two low stools, *pirhá*; on the right hand the youth, on the left the girl. The veil of the bride is tied to the *chaddar* of the bridegroom. This ceremony is called *ganth jorá*. In the woman's veil are placed *paisá* and rice; in the *chaddar* of the man, betelnut and rice. After this sacrificial prayer is made (not by Muhammadans), and then the stools of the pair are exchanged, the bride sitting down on that of the bridegroom, and *vice versá*. Then the sacred mark (*tilak*) is made on the forehead (not by Muhammadans) and necklaces are put on the husband, and the pair take their departure. The final moments are a scene of great sorrow, real or affected. The mother weeps violently and noisily; the women of the family beat their breasts as if the girl were going to her death; and the girl herself, who one would think was glad

Chapter III, B.

Social Life.

Mukláwa.

enough, puts in a sympathetic whine, which she stops on the slightest occasion. Meanwhile, the bridegroom stands by and looks foolish. The Rájpúts don't send the bridegroom to fetch his wife: his *pagrí* and knife are sent to represent him. The *mukláwa* takes place in the third or fifth year after marriage. When the bride and bridegroom are both adult or adolescent at time of marriage, the ceremony of changing stools, called *pirha-pher,* may be appended to the other, and this does instead of the regular *mukláwa.* There is also some disagreement among the various tribes as to which party takes the initiative, some saying one, some the other; but this does not appear practically important, as neither side can really move unless the other agrees.

Karáó or widow-marriage.

Second marriages (*karáó* or *haréwa*) are practised by most of the Hindu tribes, Játs, Gújars, Ahírs, Gaurwás, &c. Part of the Rájpút Chauháns even have taken up the custom, and on this score are called Chauháns simply, without the addition of Rájpúts: their stricter kinsmen will not acknowledge them or intermarry with them now. The Hindu Tagás, and the Brahmins still keep up the old prohibition too. The Muhammadans of course are free to marry again, and the *karáó* of a woman of Islám is called *nikáh sáni* (a second marriage). For the Hindu *karáó* there is no other ceremony than that of collecting the brotherhood and in their presence putting a veil over the new wife, with *churís* (bracelet rings). This is always done: and when it has been, the *karáó* wife is in all respects a legitimate wife, and her sons inherit with those of the wife married by *shádí. Karáó* should not be made within a year of the husband's death.

Restrictions of consanguinity in marriage.

The restrictions forbidding marriage with relations are more wide in their scope than ours. The narrowest ban is that of one *gót* or clan, *viz.*, that the wife must not be of the husband's *gót,* but Shaikhs and Saiyids do not observe this. The Meos bar only one *gót,* the man's own. Among the Gújars, the Muhammadans of Sunípat also do this; but those of Ballabgarh like their Hindu confreres bar three *góts,* the man's own, the mother's, and the father's mother's *gót.* The Gaurwás do the same. On the other hand the Hindu Ját adds a fourth *gót* with which it is unlawful to marry—the mother's mothers; and the Ahírs do the same. Muhammadan Játs, an unimportant section of the tribe in this district, do not appear to know their own minds about the fourth *gót*; and indeed this part of the ban is a moot point among several tribes, those who bar only three *góts* asking satirically :—

"Who cares for the restriction about marrying one of the mother's mothers *gót* ?"

Disposal of the dead.

The Hindu thinks the corpse should be burned at once on the death occurring, the unpleasantly suggestive reason being given that if worms are bred in the dead body then other animals are burned with it. His nearest male relatives bathe the body, and put clean clothes on it with a *chádar* (not shoes) covering the feet; a rough stretcher (*pínjrí*) is made and on it cotton is laid to make it soft, and it is shouldered by four near relatives who take it to the cremation ground (*marghat* or *chíhání*); the eldest son

Chapter III, B.

Social Life.

Disposal of the dead.

or nearest relative sets fire to the clothes, and a watcher is left by the fire three days to see that it does its work: he may be any relative except the son-in-law (who is not of the same *gót*). The bones that remain unburnt are called *phúl*, but the name properly is confined to the bones of the fingers and toes. It is a favourite act of filial piety to take the *phúl* to the Ganges, and if a man is well-to-do he will almost certainly build a kind of memorial or *mausoleum* (*chhatri*) over the spot where the corpse was burnt. In such case of course the cremation has taken place on private land, not on the common ground like the *marghat*. The Muhammadan corpse is of course buried not burnt. It is washed and dressed as with Hindus: prayers are read at the grave as usual with men of this faith.

Ceremonies after death of relations.

Thirteen days after a death the Ját feeds Brahmins; and *hom* is performed as at birth. The Muhammadan performs this kind of charity to *fakírs* on the twentieth and fortieth days. The Hindu continues his alms once a month for a year, *i.e.*, till the anniversary after death *(barsódí)*. On the fourth anniversary (*chaubarsi*) he gives a cow to Brahmins and clothes. After this, once a year he has to feast the holy men, and the day is called *khíyái*.

Language.

Table No. VIII shows the numbers who speak each of the principal languages current in the district, separately for each *tahsíl* and for the whole district. More detailed information will be found in Table IX of the Census Report for 1881, while in Chapter V of the same report the several languages are briefly discussed. The figures in the margin give the distribution of every 10,000 of the population by language, omitting small figures. The Urdu of Delhi, polished in the Court of the Great Mogul, is the purest spoken in India. The townspeople use it without exception, though, of course, speaking it in various degrees of excellence. But the villagers up to the very walls of the city use the Hindi or Braj of the Delhi territory, which contains a singularly small admixture of Persian. Panjábi is spoken chiefly by the Sikh soldiery, and by some colonies of Panjábi Játs who have settled in the district.

Language.	Proportion per 10,000 of population.
Hindustání ...	9.910
Bágrí ...	25
Kashmírí ...	1
Panjábi ...	42
Pashtú ...	3
All Indian languages ...	9,983
Non-Indian languages ...	17

Education.

Table No. XIII gives statistics of education as ascertained at the Census of 1881 for each religion and for the total population of each *tahsíl*. The figures for female education are probably very imperfect indeed. The figures in the margin show the number educated among every 10,000 of each sex according to the

	Education.	Rural population.	Total population.
Males.	Under instruction	72	187
	Can read and write	357	427
Females.	Under instruction...	2·6	9·8
	Can read and write	1·7	17·7

Chapter III, B.

Social Life.

Education.

Census returns. Statistics regarding the attendance at Government and aided schools will be found in Table No. XXXVII. The distribution of the scholars at these schools by religion and the occupations of their fathers, as it stood in 1881-82, is shown in the margin. The mission schools are described at pages 63—8 and the other educational institutions in Chapter V.

Details.	Boys.	Girls.
Europeans and Eurasians ...	4	18
Native Christians ...	48	...
Hindus	3,715	79
Musalmáns	1,069	24
Sikhs	57	1
Others	...	...
Children of agriculturists ...	1,899	...
" of non-agriculturists	2,942	...

The last two lines of figures do not include schools under the Deputy Commissioner.

The following is a detail of the printing presses, other than those belonging to Government, which are to be found in the district, together with the number of periodicals published at each :—

Printing Presses in the Delhi District as they stood in 1881-82.

Name of Press.	Publications thereat — Newspapers.
Muhammadi ...	1
Akmal-ul-Matábia ...	1
Chasmai Faiz ...	2
Muir Press ...	2
Raziwi ,, ...	1
Morári Lál Press ...	2
Nasrat-ul-Matába ...	3
Sitara-i-Hind ...	1
United Service Press ...	1
Imperial Press ...	1

Character, disposition, and physique of the people.

The character and disposition of the people is described in the notice of the several castes which will be found in the next section of this chapter. The following paragraphs are taken from Mr. Maconachie's description of the villagers of the Delhi District :—

" The physique of the ordinary *zemíndár* of the district differs much among the various tribes, depending apparently more on caste and tribe than anything else. The Játs of the well villages are generally healthy and strongly made, with a frame which compared with an Englishman's is very light, but very often exceedingly wiry and capable of great endurance. The average weight is supposed by an intelligent man of their class to be *Chaudah dharí* = 70 *sers*, or rather more than 140lbs., say 9 stone and a half. I should think this a fair estimate : certainly it is not too small. The Ját skin is a light brown, and in a young man is smooth and fresh-looking, reminding one more of the traditional Italian olive complexion than anything we mean by the somewhat opprobrious epithet, dark. The Shaikh here is physically very inferior and the Muhammadan Tagah not much better. The Brahmins and Ahírs do not differ much from the Ját in appearance, while the Gújar has about the same tint. The Chauhán Rájpúts are considerably darker. The face has often regular, and sometimes even handsome features, the great fault being a want of energy in the expression, which is for the most part either apathetic or sensual. Of the women's faces one sees little, but they seem less animated even than those of the men. Their figures, however, as seen at the village well, are in youth well-rounded and supple, the arm especially with the tight-fitting silver ornament clasping the biceps is not seldom a model of comeliness, yet this grace is soon lost, as much probably from poor diet and bad sanitary conditions as anything. Both sexes have as a rule beautiful teeth, white, strong, and regular, which they clean with the usual tooth-stick (*dautaun*). The hair, of course, is black or blue-black, but the Hindu tribes shave it except the crown lock (*choti.*) The Muhammadans sometimes shave the head clean, sometimes not at all ; but a young fellow when he does not shave will generally by way of personal ornament

Character, disposition, and physique of the people.

have a parting shaven neatly from front to back of his head. The face is not shaven by the Muhammadan, though he may cut his moustache with scissors if it seem too long. The beard here as elsewhere is greatly cared for ; it is called rather grandiloquently *Khudá ká núr* (the light of God) ; and it is not fitting to cut it. Hindus generally shave the beard but not the moustache. But in times of mourning the nearest heir as a matter of course will shave himself clean on head and face. This is a point of religious duty. Both Hindus and Muhammadans shave under the armpit."

The population of the Delhi district, as a rule is not addicted to crime. The Gújars are bad thieves;* but nearly all the other tribes are peaceable and fairly honest ; crimes of violence are not common. After the Mutiny, John Lawrence wrote :" Of the "agrestic population, a large proportion are predatory and turbulent "by nature, but they appear now to know their masters and behave ac- "cordingly." The lesson received in 1857 appears to have had permanent effect, for no considerable numbers of Dehli *zemíndárs* could now be described as ill-behaved. Tables Nos. XL, XLI, and XLII give statistics of crime ; while Table No. XXXV shows the consumption of liquors and narcotic stimulants.

Poverty or wealth of the people.

It is impossible to form any satisfactory estimate of the wealth of the commercial and industrial classes. The figures in the margin show the working of the income tax for the only three years for which details are available ; and Table No. XXXIV gives statistics for the license tax for each year since its imposition. The distribution of licenses granted and fees collected in 1880-81 and 1881-82 between towns of over and villages of under 5,000 souls, is shown in the margin. But the numbers affected by these taxes are small. It may be said generally that a very large proportion of the artisans in the towns are extremely poor, while their fellows in the villages are scarcely less dependent upon the nature of the harvest than are the agriculturists themselves, their fees often taking the form of a fixed share of the produce ; while even where this is not the case the demand for their products necessarily varies with the prosperity of their customers. Perhaps the leather-workers should be excepted, as they derive considerable gains from the hides of the cattle which die in a year of drought. The circumstances of the agricultural classes are discussed below.

Assessment.		1869-70.	1870-71.	1871-72.
Class I.	Number taxed ...	1,422	1,287	844
	Amount of tax ...	15,084	25,077	7,439
Class II.	Number taxed ...	461	801	630
	Amount of tax ...	10,053	21,528	9,271
Class III.	Number taxed ...	319	367	439
	Amount of tax ...	17,916	14,210	13,895
Class IV.	Number taxed ...	16	245	19
	Amount of tax ...	3,990	13,041	3,255
Class V.	Number taxed ...	1	415	...
	Amount of tax ...	1,710	43,798	...
Total ...	Number taxed ...	2,219	3,115	1,932
	Amount of tax ..	48,753	117,654	33,860

	1880-81.		1881-82.	
	Towns.	Villages.	Towns.	Villages.
Number of licenses	1,280	1,017	1,202	1,009
Amount of fees ...	37,135	18,615	33,440	18,465

* Mr. Maconachie writes (1884) :—"There seems reason to hope that a material improvement in the habits of the Gújar is setting in. The agriculture of the hills will be greatly aided by the *bands* now being made or repaired ; and this will probably in itself prove an inducement to pursue the path of honesty,"

Chapter III, C.

Religious Life.

General statistics and distribution of religions.

SECTION C.—RELIGIOUS LIFE.

Table No. VII shows the numbers in each *tahsíl* and in the whole district who follow each religion, as ascertained in the Census of 1881, and Table No. XLIII gives similar figures for towns. Tables III, IIIA, IIIB of the Report of that Census give further details on the subject. The distribution of every 10,000 of the population by religions is shown in the margin. The limitations subject to which these figures mnst be taken, and especially the rule followed in the classification of Hindus, are fully discussed in Part I, Chapter IV of the Census Report. The distribution of every 1,000 of the Musalmán population by sect is shown in the margin. The sects of the Christian population are given in Table IIIA of the Census Report; but the figures are, for reasons explained in Part VII, Chapter IV of the Report, so very imperfect that it is not worth while to reproduce them here. Table No. IX shows the religion of the major castes and tribes of the district, and therefore the distribution by caste of the great majority of the followers of each religion. A brief description of the great religions of the Panjáb and of their principal sects will be found in Chapter IV of the Census Report. The religious practice and belief of the district present no special peculiarities; and it would be out of place to enter here into any disquisition on the general question. The general distribution of religions by *tahsíls* can be gathered from the figures of Table No. VII; and regarding the population as a whole, no more detailed information as to locality is available.

Religion.	Rural population.	Urban population.	Total population.
Hindu ...	8,427	5,534	7,511
Sikh ...	2	43	15
Jain ...	77	194	114
Musalmán ...	1,491	4,135	2,328
Christian ...	3	93	31

Sect.	Rural population.	Total population.
Sunnis	956	961
Shiahs	15·3	20·9
Others and unspecified	28·5	17·2

Religious belief.

The religion of the Ját is Hinduism; but he does not know very much about it. He talks about *Parmeshwar*, and the more intelligent men say they believe in only one God, but there is a traditional worship of tutelary village deities (*bhumián*) which lies really nearer to his heart. The *bhumián* was once a man, and he has now gained his apotheosis in the half-fond half-fearful superstition of his descendants. The Brahmins say he must be honoured by worship at the *thán* which has been existing for generations in his name, a *pakka* built little pillar with places to burn little lamps in, which are used alike by Hindus and Muhammadans in devotional offices: and food distributed to the holy men at this spot is a religious almsgiving of spiritual value. When his son is married, he will pay a religious visit to the shrine of the *bhumián*; and when his cow or buffalo calves, a little* of the first milk

* A very little is sufficient, as the *bhumián* is not hungry as men are. He wants faith and not food, according to the proverb. "Spiritual persons hunger for respect and not for food."

Religious belief.

given will be boiled hard and given as an offering to the deity. Besides the *bhumián* there is the *ghází mard*, a relic apparently of Muhammadan tradition, a tutelary deity too with a difference: the Muhammadans take the place of the Brahmins as regards receipt of beneficences in his name, though both Hindus and Muhammadans worship him. The goddess of small-pox too should have a place of worship* like the *bhumián* in every village of a properly devotional turn of mind, but an intelligent Hindu complains that the worship of this personage has gone somewhat out of fashion since vaccination has systematically been practised. Besides the local deities, the villager pays great respect to the gods of the various shrines in his neighbourhood. The fairs of the district depend greatly on a religious origin, but the people make the occasion of worship a time of social conviviality and amusement. Excepting the fancies already noticed about lucky days, the Delhi *zamíndár* does not care much about demons and other evil spirits. Having seen the railway he has passed that stage: the people believe in the existence of professors of "clairvoyance," men who can tell others "what their wives say fifty miles off." This learning is called *bhut bidya* (dæmonology) and there was a few years ago a well known professor of it at Nyabáns in Sunipat.

Fairs.

Fairs in Europe are generally looked on as originated for purposes of trade. In India it is not always or often so. These gatherings here have for the most part a religious origin, being connected with some shrine or other object of religious veneration. Then when thousands of people are collected, it is natural for traders to come also, finding special opportunities for selling their wares. In Delhi, however, there is very little trading done at the fairs, which are looked on more as holiday gatherings than anything else. They are indeed a great feature in the social life of the *zamíndár*, and though no doubt they bring abuses in their train, and are partly responsible for increased expenditure and occasional thriftlessness, yet it is hard to see the pleasant throngs of holiday-makers crowding the roads on their way to them—father, mother, and children all decked out in their best clothes, trudging along together, and a merry laugh now and again breaking out from parties here and there as one tells some trivial story to beguile the way, without feeling that there is much innocent amusement and relaxation possible and often actually realised in this way. A list is given at page 59 of 33 fairs which take place periodically in various parts of the district. They differ of course much in importance, and many are of purely local interest; yet within the narrow circle of two or three miles the advent of the fair-day is regularly observed, and in any matters concerning the *zamíndár* must certainly be taken into consideration. The most important gatherings are those at Bahápur, some six miles south of Delhi, at Mahrauli, and at Sunipat. The fair at Mahrauli especially is a favourite resort for the Delhi people. The great one is in Sáwan and is fixed yearly by popular

* This is called *mánd* and is much like the *thán*; a satirical saying in connection with these shrines may be given: "If you believe in it, it is God; if not, it is old earthen wall plaster."

Chapter III, C.

Religious Life.

Fairs.

consent for some week in that month. It is called the *pankhá mela*, because *pankhás* are carried in procession on Wednesday to the Hindu temple, Jog Maya, and on Thursday to the shrine of Kutbdín, for the maintenance of which a tolerant Government allows a *jágír* of Rs. 2,000 a year. The fair at Bahápur occurs in Chait on the 8th and 9th days of the moon, and on the corresponding days in Asoj. This is also a religious meeting; the origin of its localisation at Bahápur is said to be that a *rájá* in olden time saw a vision of the goddess Devi on the spot, and forthwith built a shrine. Subsequently to this, *rájá* Kidárnáth erected a temple of masonry, and the fair is said to have been held continuously since then. The fair at Sunipat is held on the 11th day of the *muharram*. Offerings of sweetmeats, bread, &c., are made at the shrine of Nasir-ud-dín,* the local saint, who is said to have made a *jihád* upon the Hindus and to have met with a martyr's death.

Church of England Mission.

This mission owes its origin to the zeal of some members of the congregation of St. James' Church, who raised, between 1850 and 1853, the large sum of Rs. 30,000 which they made over to the Society for the Propagation of the Gospel: the Society made a further grant of Rs. 80,000, and in February 1854 sent the first missionaries, the Rev. J. S. Jackson and Rev. A. R. Hubbard, both graduates of Cambridge. Before their arrival however the first two leading converts were baptized in 1852. Their names deserve record. One of them, Dr. Chimman Lal, was Assistant Surgeon, and lost his life at the hands of the mutineers. The other was Professor Rámchandar, who became well known as a writer on Mathematics, and was successively Professor of Mathematics in the Delhi College and tutor to the Maharájah of Patiála. In 1857 Mr. Hubbard, and two younger men who had just joined the mission, Mr. D. E. Sandys and Mr. Lewis Roch, with Dr. Chimman Lal and two ministers of the Baptist Mission, were killed by the rebels, and the mission totally destroyed. Mr. Jackson's life was saved because ill-health had driven him from Delhi a short time before the mutiny broke out.

After the capture of the city in the September of that year the work was kept together by a small band of native Christians and enquirers, until, at the beginning of 1859, the foundations of the Mission were re-laid with much careful forethought by the Rev. T. Skelton, Fellow of Queen's College, Cambridge. In 1860 the Mission was joined by the Rev. B. R. Walter, of Hertford College, Oxford, in 1862 by the Rev. J. E. Whitley of Queen's College, Cambridge, and in 1867 by the Rev. H. C. Crowfoot, Fellow of Jesus College, Oxford. In addition to educational work among the higher and lower classes, with preaching and other religious teaching in the

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* Mr. Maconachie writes: "I once heard an account which made his death not so meritorious as that of a *shahíd*, though it was certainly unfortunate. 'A *rájá* wanted his horse and so killed him,' said my informant, a Hindu, who seemed rather to grudge unnecessary ascription of religious merit in the way of martyrdom. I turned to a Muhammadan for explanation. 'Well,' said he, 'it was partly about a horse, but it was because he was a *pír* too.' And then he added: 'He was the first man in India who rode on horses: before his time there were none, and *the Rájás used to ride on buffaloes*.' The Hindu was silent."

Statement of Fairs.

1	2	3	4	5	6	7	8
No.	Village.	Occasion of Fair.	Time of year.	Average number of persons attending.	Duration.	From what parts.	REMARKS.
1	Mahraulí...	For pleasure ...	Wednesday & Thursday once a year in Sáwan.	From 3,000 to 12,000	2 Days	Delhi, Gurgáon, Farídábád, Ballabgarh, Badarpur.	This fair is not of ancient date. Akbar II used to reside at Mahraulí in the rainy season and started the fair. On the Wednesday the Hindus take *Pankhas* to the temple of their deity Jogmayájí, and on Thursday the Muhammadans do the same to the Tomb of Kutb-ud-dín.
2	Bahápur ...	For worship ...	Twice a year on 23rd and 24th Chait and 23rd and 24th Asauj.	20,000	2 Days	Delhi, Ballabgarh Sunípat Gurgáon, & Palwal, &c.	This is a religious fair, held twice a year. It is said that here in old times a Rájá once had a vision of the goddess Kálí and built a shrine on the spot. Rájá Kidárnáth subsequently erected a *pakka* building. The place is one of considerable local repute.
3	Badkhal ...	For bathing ...	21st Bhádon ...	5,000	1 Day...	Ballabgarh, Gurgáon, Palwal, Farídábád, & Núh.	People come to bathe at a spring which issues from the hill side in this village, and a fair is held once a year on the spot. There is no temple.
4	Dhauj ...	To make offerings	21st Bhádon ...	6,000	1 Day...	Ballabgarh, Gurgáon, Palwal, Farídábád, Núh, Firozpur and Alwar.	There is a *pipal* here, sacred to Kálí Deví, and people stung by snakes are said to find a cure from her help, if they vow to sacrifice at her shrine. Hence its popularity.
5	Farídábád	For bathing ...	Twice a year on the last days of Chait and Asauj.	1,500 to 2,000	1 Day...	Ballabgarh, Farídábád, Badarpur and other neighbouring villages.	There is a shrine here, attendance at which with bathing in a spring near the shrine is said to cure itch and such like diseases.
6	Ballabgarh	For pleasure ...	21st Bhádon ...	1,500	1 Day...	Ballabgarh and Farídábád.	A fair started to catch the people on their way back from Badkhal. Not a large one.
					TAHSIL	SUNIPAT.	
1	Lahráráh...	For worship ...	15th Chait ...	1,000	1 Day...	Sunípat and Rohtak ...	A small fair held in honour of Kálí Deví. Notan Dás was a *fakir* who being very devout burnt himself alive, and Rájá Arjandeo built a house over it, and the fair was started to celebrate the history.

Statement of Fairs.—(Continued.)

1	2	3	4	5	6	7	8
No.	Village.	Occasion of Fair.	Time of year.	Average number of persons attending.	Duration.	From what parts.	REMARKS.
					TAHSIL	SUNIPAT.—*Continued*	
2	Chatáná ...	Worship ...	Twice a year, on 22nd of Chait and Asauj.	1,000	1 Day...	Sunípat.	A small fair held for the worship of Kálí Deví at a *pakka* shrine. History not known.
3	Maweí ...	For making offerings.	Twice a year on 29th Chait and Asauj.	1,500	1 Day...	Sunípat and Pánípat ...	This is a fair held in honour of Baba Zinda who buried himself alive like him of Lahrárá.
4	Jawáharí...	To make offerings to the goddess of small-pox.	7th Chait ...	600	1 Day...	Sunípat	This is a small fair kept chiefly by women to celebrate the worship of Mátá the goddess of small-pox.
5	Kundal ...	For worship ...	Twice a year on 13th Sáwan and 28th Phágan.	1,000	1 Day...	Sunípat and Delhí ...	A small fair held for the worship of Mahádeo.
6	Kimáshpur	Worship ...	21st Bhádaun ...	500	6 Hours	Sunípat	A gathering held to celebrate the memory of a *zamíndár* whose only name now known is Bábá. When he died several neighbours had dreams which came true, so they concluded he had something of the nature of divinity and started the fair for his worship.
7	Garhí Mehndípur.	Bathing ...	Twice a year on last day of Kátik and 25th of Jeth.	5,000	1 Day	Sunípat and Kutánáh ...	This fair is for bathing in the Jamna. Brahmins get food on such occasions. On Sundays all the year round people come and bathe here.
8	Sunípat ...	Urs Násir-ud-dín	11th Moharram ...	5,000	1 Day	Sunípat	This is a well known shrine in honour of Násir-ud-dín whose story has already been told.
9	Sunípat ...	Urs Mírán Mukand.	14th Moharram ...	1,000	1 Day	Sunipat	A smaller fair held in memory of a companion of Násir-ud-dín of less fame, but a martyr also.
10	Sunípat ...	Pleasure ...	Last day of the month Sáwan.	600	1 Day	Sunípat	A new fair, as yet small, started by the Hindus (perhaps in envy of the Muhammadans). It is held at Shimbudiál's tank.
11	Sunípat ...	Worship ...	29th Bhádon ...	600	1 Day	Sunípat	The Saráogís here worship at Páras Náth's shrine, and strangers come to look on.

					TAHSIL	DELHI.	
1	Pilanji Hassanpur Alipur.	Worship ...	In the month of Poh 1st Sunday after new moon.	2,000	1 Day	Delhi	A religious fair held to celebrate the finding of an image of Bhairon, attendant of Kálí. Some one dreamt that a shrine should be built on the spot in order that wishes and vows might be fulfilled. Hence the shrine and vows are (sometimes) met by fulfilment of wishes.
2	Nángal Dewat.	Worship ...	15th of every Hindu month.	100	6 Hours	Neighbouring villages.	A Hindú gathering in obedience to an order received from some Saiyíd who died "possessed"; only a small affair.
3	Sherpur Kalán.	Worship ...	8th Chait ...	100	6 Hours	Delhi	A small affair celebrating the discovery of an image of Kálí. Somebody dreamt (as usual) that a fair ought to be held here.
4	Jharauda Kalán.	Worship ...	Twice a year on 21st of Asauj and Jeth.	4,000	2 Days	Neighbourhood of Delhi and Rohtak District.	A considerable gathering to honour the memory of a *fakír*, Harídás.
5	Isákpur Pánah Gharíb.	Worship ...	17th Bhádon ...	500	1 Day	Dhandásá, Malakpur, Ojwah, Shamspur, Isakpur Pánah Gharíb and Isakpur Pánah Sujan.	A religious gathering at a tank called 'Búre Bábú' after a *fakír*.
6	Khandrát Kalán.	Pleasure and religion.	15th to 25th Asauj.	10,000	11 Days	Delhi and its neighbourhood, Gurgáon, Mirath, Ballabgarh and Sunípat.	Hindus worship, and Muhammadans amuse themselves at this fair held in honour of Rámlílá, a very important fair.
7	Bánskaulí.	Pleasure and science.	Last day of Asárh ...	2,000	1 Day	Delhi and its neighbourhood.	A religious fair at which weather prognostications for the current year are made. Brahmins take a stick with a bit of rag on it to the top of a hill, and anxiously consult as to whether the wind which blows it denotes a good wind for the year, for crops, rain, &c.
8	Bánskaulí.	Worship and pleasure.	Last day of the month of Sáwan.	1,000	1 Day	Delhi, Mirath and Bulandshahr.	Poor caste people worship on this occasion, *kumhárs*, *fakírs*, barbers, &c.
9	Narelah ...	Worship ...	Twice a year on 21st of Chait and Asauj	1,500	2 Days.	Delhi, Sunipat and Rohtak.	Worship is celebrated of an image of Deví Mátá, and offerings are made which the Narelá *zámindárs* take.
10	Narhaulah	Worship ...	Weekly, on every Tuesday.	400	6 Hours	Delhi and its neighbourhood.	A small affair every Tuesday at the shrine of Hanúmán.
11	Narhaulah	Worship ...	28th Chait to 30th Chait.	2,000	3 Days.	Delhi and neighbourhood.	A religious fair for the worship of Deví.

Statement of Fairs.—(Continued.)

1	2	3	4	5	6	7	8
No.	Village.	Occasion of Fair.	Time of year.	Average number of persons attending.	Duration.	From what parts.	REMARKS.
					TAHSIL.	DELHI—*Continued.*	
12	Bánskaulí	Urs Sayad Hasan	22nd & 23rd Shábán.	2,200	2 Days.	Delhi and neighbouring country.	This is a Muhammadan fair—the attendants of the shrine of Urs Saiyid Hasan cook food, and distribute it to the visitors, who make offerings. Fire works are let off by the men who trade in them.
13	Jahán numá	Worship ...	7th to 12th Rabí-ul-awal.	2,000	6 Days.	Delhi and surrounding country.	Another Delhi fair held in honour of Muhammad.
14	Ghiáspur ...	Urs Sultán Nizám-ul-dín Aulia.	Twice a year on 17th and 18th of Shawwál and Rabí-ul-sáni.	......	......	Delhi and neighbouring villages as well as *fakirs* from all quarters.	Same as No. 12, but the man honoured is Sultán Nizám-ud-dín.
15	On Karnál road from Láhori Gate of Delhi to Sabzímandi	Pleasure ...	Twice a year on 5th of Asauj and Chait.	1,000	6 Hours	Delhi	A pleasure fair, but an occasion of religious worship to people of low caste, such as sweepers, who carry pennons made of sticks and rags in honour of their *Pír.*
16	Jahán numá	Pleasure ...	Weekly, every Friday	3,000	3 Hours	Delhi	This is a fair for wrestling—the city people turn out every Friday in good numbers to see it.

N.B.—The numbers given here are in several instances much below the mark.

Chapter III, C.

Religious Life.

Church of England mission.

bázárs and *bastís* of the city, one of Mr. Skelton's first efforts was to raise funds for the Church to be built in memory of the English and Indian Christians who lost their lives on the outbreak of the mutiny. After unavoidable delay, occasioned by the severe famine of 1860-61, the foundation stone was laid by Dr. Cotton, Bishop of Calcutta, in March 1865; and St. Stephen's Memorial Church was first opened for service on the 10th anniversary of the Mutiny, May 11, 1867. In 1863 Mrs. Winter began medical work among the women and children; subsequently a dispensary with a few rooms for in-patients was opened in the Chándni Chauk; and a class opened for the training of native women as nurses. After a regular course of teaching, both practical and theoretical, these women are examined by the Civil Surgeon, and on passing receive a testimonial permitting them to practise under the general guidance of the head of the medical mission; this class receives a grant of Rs. 75 a month from the Municipal Committee. Miss Englemann has been in charge since 1875, and the number of separate cases attended has increased from 3,363 in 1871 to 16,000 in 1883, with an aggregate of 46,154 attendances, or about three to each patient, in the course of the twelve months. The memorial stone of a new hospital for women, now being erected in the Chándni Chauk in memory of Mrs. Winter, was laid by H. R. H. the Duchess of Connaught on January 18, 1884. In 1873-74, with a view to increasing the points of direct contact with the people, the city and suburbs were mapped out into eight divisions, somewhat on the pattern of English parishes, while the country round reaching to Riwári, Hissár and Karnál, was divided into eight mission districts, of which however only three, with their centres of work in Ballabgarh, Mahraulí and Alipur, are within the Delhi district. An event of great importance for the stability and growth of the mission took place in 1877, when the mission was strongly re-inforced by a body of missionaries, chosen in the University of Cambridge, and largely supported by the Propagation Society. They, with the original organisation, form one mission carried on since that date under the title of "The S. P. G. and Cambridge Mission in Delhi and the South Punjab." The following institutions are carried on by this united body: St. Stephen's College, more fully detailed below by Mr. Carlyon, with 30 pupils; a High School and six branch schools with 628 boys; 32 small schools for the lower orders in Delhi; and 24 other places attended by nearly 700 boys and young men. A school for training Christian school masters and a Boarding School for Christian boys; besides the general work in the city and country districts.

Work among the women, besides the medical work already mentioned, is carried on as follows: A European Normal School for Zanana school teachers; a Native Normal School, one upper primary, and 17 lower primary schools, (some of the latter are beyond the Delhi district); one Industrial School, Zanána pupils; and a refuge for either destitute women or those who have led a bad life. The number of female pupils is 740, making with the boys' schools a total of about 2,000 pupils taught by this mission. The number of persons baptised since 1859 is men 585, women 268, children 588 or a total of 1,441. The work of the mission

Chapter III, C.

Religious Life.

Church of England mission.

in Delhi is carried on by nine clergymen, of which a list is given in the margin, including six of the Cambridge Brotherhood, besides four in other districts, and by 13 Zanána missionaries, besides eight ladies employed in the branch mission. The total number of towns and villages occupied is 26, and there are about 1,000 baptised persons in the various native congregations; of whom nearly half are in Delhi and its suburbs.

Rev. B. R. Winter	1860
Rev. E. Bickersteth	1877
Rev. H. C. Carlyon	1878
Rev. S. S. Allnutt	1879
Rev. G. A. Lefroy	1879
Rev. A. Haig	1883
Rev. J. W. T. Wright	1883
Rev. A. C. Maitland	1880
Rev. R. W. O. Martin	1882

The Cambridge Mission.

The Revd. Mr. Carlyon has kindly furnished the following account of the Cambridge Mission. This Mission owes its origin to the efforts of some leading members of the Cambridge University, who thought that the time was come for the Universities to take a more prominent part in evangelising India. They believed their object would be best obtained by a body of men living and working together as a brotherhood, whose endeavours should be directed to higher education, (especially of Christian boys and young men), the training of Christian agents for educational and evangelistic work, literary work, and general contact with the more thoughtful natives. At the invitation of the Society for the Propagation of the Gospel, who also came forward with liberal pecuniary help, Dehli was selected as affording a most suitable sphere for realising the abovementioned objects, and the mission was started in India under Revd. E. Bickersteth, Fellow of Pembroke College, in 1877 with the title of the Cambridge Mission to North India. The present members of the Mission, with the dates of their arrival in India are as follows :—

Revd, E. Bickersteth	Pembroke College	1877
„ H. C. Carlyon	Sidney Sussex	1878
„ S. S. Allnutt	S. John's	1879
„ G. A. Lefroy	Trinity	1879
„ A. Haig	Pembroke	1883
„ J. W. T. Wright	Pembroke	1883

St. Stephen's Mission College, Dehli.

This institution was founded originally in 1865, in connexion with the S. P. G. Mission School, to enable its students to pursue their studies up to the Calcutta B. A. course. It was, however, practically in abeyance till 1881, when it was resuscitated by the Cambridge Mission, a body of men working in connexion with the S. P. G. Mission. In 1882 its scope was enlarged, and it became a grant-in-aid institution, open to all comers. This extension was due to the failure of a scheme for reviving the old Government College under native auspices. In October of the same year it was affiliated to the Punjab University, which received its charter as a University in that month. Its students are prepared for the Examinations of that University only. It now (July 1883) numbers about thirty students. The following is the staff of teachers :—

Revd. S. S. Allnutt, M.A. ...	Principal.
„ G. A. Lefroy, M.A. ...	Professor.
„ H. C. Carlyon, M.A. ...	Professor.
Babu N. Mahendra Dutt, B.A.	Assistant Professor of Mathematics.
„ Nritya Gopal Bose, M.A.	Professor of Natural Science.
Maulavi Shah Jehan ...	Professor of Persian.
Maulavi Jamíl ul Rahmán ...	Professor of Arabic.
Pandit Vihári Prasáda Dube ...	Professor of Sanskrit.

Chapter III, C.

Religious Life.

St. Stephen's Mission High School, Delhi.

This school was opened shortly after the Mutiny, in connexion with the S. P. G. Mission in Delhi. It has a system of branch schools connected with it, which are situated in various parts of the city. At present (July 1883), the number of boys in the branches is 428, in the High School 200. The staff of masters consists of 39 native teachers; four European Missionaries also take part in the teaching. The school is under the superintendence of the Principal of the College. It is a grant-in-aid institution, and rents a large native building situated near the Kotwáli, Chándni Chauk. Connected with the College and School, is a club numbering about 100 members. Its object is to promote the intellectual and social welfare of the students, and to provide them with sensible and attractive amusements. It comprises Cricket and Athletic Departments, a Debating Society in which social and other topics are discussed in English and Urdu, and lectures on science and other subjects are given. There is a reading-room attached to it, which is open every evening, and is provided with a good library, magazines, newspapers games, etc.

The Baptist Mission.

The following account of the Baptist Mission has been kindly furnished by the Reverend Mr. Carey. In 1814, the Reverend John Chamberlain, a Baptist Missionary, then employed by the Begum Sumru, at Sirdhanah, as tutor to her son, visited Delhi for the first time. During the six weeks Mr. Chamberlain remained in the city, he preached daily without molestation. He subsequently returned to Sirdhanah, and thence to Serámpur, where he remained. From 1815 to 1818, preaching was carried on by Mr. Kerr, a Baptist gentleman, assisted by three native converts. In the latter year, Delhi was recognised as a Mission station in connection with the Baptist Missionary Society in London, and a Missionary, the Reverend J. T. Thompson, was directed to assume charge of it. He arrived at Delhi on the 3rd April 1818, and continued to reside there (with a few breaks) till his death in 1850. The first baptism which took place in Delhi (1821), was that of a Rájpút woman, who afterwards became the wife of a French officer in the service of the Begum Sumru. At the close of 1822, an aged Brahmin, followed her example, in the next year another native was baptized, and in 1825, four Europeans and a Brahmin joined the church. In 1826, the church consisted of eleven persons. In 1845 a chapel was erected near the Royal Palace for the use of the converts. Mr. Thompson died on the 27th June 1850, and from that time to 1854 Delhi remained unoccupied, till Waláyat Ali, a native convert, was sent from Chitoura to carry on the work. In March 1856 the Reverend J. Mackay, of the Baptist Mission Society, arrived. Both these gentlemen were murdered in the mutiny of the following year.

Since the establishment of the Mission in 1818 up to this time (1856), about sixty persons had been baptized, and a native church formed; schools for both Hindus and Muhammadans had been started in the city; and the translation of the New Testament and Psalms, and several tracts into Hindi had been printed. The Reverend James Smith, Baptist Mission Society, on his return to India in 1858, immediately proceeded to Delhi.

Chapter III, C.

Religious Life.

The Baptist Mission.

On his arrival there he found only four persons (one native), formerly connected with the church; the rest had been killed or scattered. Mr. Smith immediately recommenced daily *bázár* preaching and teaching in the *bastís*. The chapel, which had been greatly injured by the rebels, was repaired and re-opened for divine service. The work was very successful, the first year especially, amongst the *chamárs*. Seven primary schools were opened by Mr. Smith for the benefit especially of the children of the lower classes. Preaching in their *bastís* was also carried on systematically. During the year, ninety-four Christians were baptized (including ten Europeans), and a new chapel erected. The Rev. D. P. Broadway, and the Rev. Josiah Parsons joined the Mission the same year. Up to 1874 Mr. Smith was assisted temporarily by several Baptist Missionaries; in that year his colleague and successor, the Rev. R. F. Guyton (now in charge, 1883), arrived from England. The following year, the Rev. W. Carey, M.B., &c., established a Medical Mission at Delhi in connection with the general work of the Baptist Missionary Society. In December 1881, a third Missionary was added to the staff of the Mission. Since 1856, the membership of the native church has increased to about 300 at the central church, which this year (1883) elected its own pastor (a native), who is supported entirely by the members themselves. There are five other little churches in the suburbs, two of which number are presided over by pastors chosen by the members. Including the members of these churches there is a total of about 500 native members of the Delhi Baptist Mission churches. Forty-six persons were baptised in 1882.

Baptist Mission Schools.

There are twenty-seven schools connected with the Baptist Mission at Delhi. The object in their establishment has been to place the means of acquiring a knowledge of the vernaculars within the reach of the children of the lower classes, and by these means to lead to their ultimate conversion to Christianity. The schools have, with few exceptions, all been begun at the request of the people themselves, and are generally well attended. Throughout the Mission, efforts are made to educate the lowest classes of the natives, more especially the *chamárs*. Since 1858, there have been *nine* Mission Schools opened in the city, *seven* in the suburbs, and *eleven* in the district (including four in the Mirath District). They now contain nearly 1,000 scholars, 150 of whom are the sons of Native-Christians. There is in addition a boarding school containing twenty-five boys. All the forty teachers are Native Christians, and lessons on the Scriptures are systematically taught in the schools; all are of the upper and lower divisions of primary schools, with the exception of the boarding school, which aims at being a Middle School. Thirteen of the boys of this Mission passed the lower standard examination last year (1882.) Most of the school buildings have been erected at the expense of the Mission, and are the ordinary thatched mud huts, except at Shahderah (Mirath District), Paharganj, Purana Qila, Farídábád, Farásh Khána, and Kalán Mahal, where there are substantial brick buildings, the property of the Baptist Mission.

Chapter III, C.

Religious Life.

Baptist Medical Mission and Dispensary.

In 1876, a Medical Mission in connection with the Baptist Missionary Society was established by the Rev. W. Carey, M.B., L.R.C.S., Edin., and a dispensary opened for the benefit especially of Native Christian patients, and those of the lower classes of natives of Delhi. Since its establishment the dispensary has been attended by a very large number of poor sick natives. The first year the number of cases treated amounted to about 10,000; last year it was nearly double that number.

Baptist Zenána Mission.

Miss Thorn has kindly furnished the following sketch of the Baptist Zenána Mission at Dehli. About eighteen years ago, 1865, Mrs. Smith, wife of the Reverend James Smith, of the Baptist Mission, Delhi, recognizing the fact that, in consequence of the social customs of the country, a large number of women could not be reached by ordinary Missionary efforts, resolved if possible to gain access to some of these ladies in their seclusion, and take to them the instruction they so greatly needed. Mrs. Smith was assisted in these endeavours by two Native Christian women, one of whom was Fatima, the widow of Waláyat Ali, who fell a martyr during the mutiny. Some difficulty was experienced at first, but the desire for instruction which the visitors created soon spread, and in 1867, thirty-five zenánas were regularly visited and a school for Muhammadan girls and women opened, to which about thirty-six came. The zenána workers then numbered two Europeans and five native women. After a few years, it was found desirable to close this Muhammadan school. In December 1871, Miss Fryer was sent from England as a zenána teacher; she introduced and taught the fine point-lace work which has gained prizes in several native Exhibitions. The number of houses visited had increased to 70. In December 1875 Miss Thorn reached Delhi, and commenced Medical work in conjunction with zenána visiting. The usefulness of such work is too well-known to need comment. During the six years' work, (there was an interval of fifteen months from illness and absence), 6,000 patients have been treated. Tne percentage of deaths cannot be given, as many of the patients come from a distance, and the result in their case is not known. Until 1876, the work of the Baptist Zenána Missison was entirely amongst Muhammadans. During that year invitations were received from several Hindu families, and the interest amongst them increased so rapidly that the Hindu pupils now exceed in numbers, and for the most part excel the Muhammadans. Amongst them there are many, especially in the Baniya caste who possess great aptitude for learning. Owing to the domestic conditions of zenána life it is impossible to give details of work and its results. Instruction is given in English, Urdu, Hindi, Scripture and different kinds of needle work. Several ladies have come out, and have been baptized, and by their subsequent conduct have proved themselves in every way worthy of the highest respect. There is also work carried on amongst the *chamárnis* in different parts of the city, and a small school, numbering at a present but nine girls, has just been commenced for this caste. And about fifty of their women and girls are gathered weekly for instruction at their own *bastis*. At the out-stations of the Baptist Mission Society, the

Chapter III, D.

Tribes and Castes and Leading Families.

Baptist Mission Girls' School.

wife of the school master is employed, if possible, among the women of that district. Such is and has been the case at Maroli, Shadrah, Chiproli and Baraut. The present staff consists of four English ladies and ten Bible women, who teach ninety Muhammadan pupils, 131 Hindu pupils, and 37 *chamárnis*.

Two years prior to the commencement of zenána work, that is in 1863, a boarding school was commenced in the Mission compound, for the daughters of Native Christians who live at a distance. It was under the care of Mrs. Parsons, wife of one of the Baptist Missionaries. It opened with eight girls. They were taught Urdu, English, Hindi, cooking and other domestic duties. It was afterwards removed to a hired house in Daryaganj, with an increase in numbers. In 1876, under Mrs. Guyton, and subsequently under Mrs. Campagnac's direct instruction, the school obtained much praise from the Government examiners, and continues to do so year by year. In May 1879, ten famine orphans were taken into the school; they were in bad health; two have since died and thirteen others been taken at different times. The conduct of all of them has been satisfactory; they appear happy, and never imply, by the slightest word, a desire to return to their old life. On Mrs. Campagnac's departure for England, December 1879, Miss Well took charge of the school. During the 20 years the school has existed, a large number of girls have married from it, and to their Christian marriages we look with great hope for the future. Many have been, and are still employed, as teachers. A permanent school-house is in course of erection by the side of the Zenána Mission House. It will afford accommodation for a greater number of girls, and it is intended to add grinding and spinning to the other duties. At present the school includes fifty pupils, one English lady, four native women, two *munshis*, one *darzi* for teaching sewing.

SECTION D.—TRIBES AND CASTES AND LEADING FAMILIES.

Statistics and local distribution of tribes and castes.

Table No. IX gives the figures for the principal castes and tribes of the district, with details of sex and religion, while Table No. IXA shows the number of the less important castes. It would be out of place to attempt a description of each. Many of them are found all over the Punjab, and most of them in many other districts, and their representatives in Dehli are distinguished by no local peculiarities. Some of the leading tribes, and especially those who are important as land owners, or by position and influence, are briefly noticed in the following sections; and each caste will be found described in Chapter VI of the Census Report for 1881.

The Census statistics of caste were not compiled for *tahsíls*, at least in their final form. It was found that an enormous number of mere clans or sub-divisions had been returned as castes in the schedules, and the classification of these figures under the main heads shown in the caste tables was made for districts only. Thus no statistics showing the local distribution of the tribes and castes are available. But the general distribution of the more important

land-owning tribes is for the most part clear and decided, and will be described in the following paragraphs under the headings of the several castes. The following figures show the area held and revenue paid by each caste and its principal *gots* or tribes, as ascertained at the recent Settlement.

Chapter III, D.

Tribes and Castes and Leading Families.

Statistics and local distribution of tribes and castes.

Statement of Lands held by the principal Tribes.

Major division of tribe.	Got. No.	Got. Name.	Amount of land owned by each tribe. Cultivated.	Uncultivated.	Total.	Revenue assessed (*máfi* and *jágír* included.)
Ahir.	1	Apharya ...	4.703	1,850	6,553	8,559
	2	Barar ...	1,259	590	1.849	2,473
	3	Jhangrolia ...	1,045	1,188	2,233	877
	4	Kalalya ...	1,255	257	1,512	2,397
	5	Nirban ...	4.497	2,921	7,418	7,581
		Miscellaneous ...	8,436	3,743	12,179	14,040
		Total ...	21,195	10,549	31,744	35,927
Brahmin.	1	Bichas ...	......	......	......	......
	2	Barduáj ...	9,832	3,857	13,689	13,501
	3	Bashist ...	1,738	519	2,257	2,232
	4	Parasar ...	3.911	1,207	5,118	6.419
	5	Kausis ...	7,717	1,377	9,094	11,983
	6	Gotam ...	2,254	1,856	4,110	3,815
		Miscellaneous ...	16.784	8,197	24,981	27,604
		Total ...	42,236	17,013	59,249	65,554
Taga.	1	Barduáj ...	14,962	8,057	23,019	26,263
	2	Bashist ...	1.330	3.578	4,908	2.558
	3	Bichas ...	2,792	1,247	4,039	3,796
	4	Kausis ...	1,510	486	1,996	2,408
		Miscellaneous ...	2,174	3,202	5,376	3,976
		Total ...	22,768	16,570	39,338	39,001
Jat.	1	Antal ...	20,514	19,633	40,147	44,242
	2	Udár ...	1,673	474	2,147	3,378
	3	Bhal ...	3,478	2,126	5,604	6,008
	4	Bainíwal ...	1,005	583	1,588	1,764
	5	Bhuiyán ...	1,053	267	1,320	1,429
	6	Táng ...	1,805	1,087	2,892	4,908
	7	Tanwar ...	1,857	132	1,989	2,626
	8	Palán ...	1,173	717	1,890	2,240
	9	Chalesar ...	1,223	557	1,780	1,980
	10	Man ...	2,643	2,188	4,831	3,701
	11	Jadón Bhuian ...	2,028	412	2,440	3.115
	12	Sulanghi ...	6,259	2,566	8,825	8,397
	13	Chikárá ...	4,889	2,956	7,845	3.150
	14	Ráwat ...	1,510	538	2,048	2,645
	15	Dhinkar ...	3,041	1,768	4,809	6,674
	16	Sahrawat ...	12,547	6,472	19,019	19,930
	17	Dakar ...	11,907	4,900	16,807	19,815
	18	Kakeraul ...	1,426	162	1,588	2,453
	19	Kuharíá ...	1.624	508	2,132	2,765
	20	Púneya ...	2,213	334	2,547	4,142
	21	Malak ...	2,308	506	2,814	3,215

Chapter III, D.

Tribes and Castes and Leading Families.

Statistics and local distribution of tribes and castes.

Statement of Lands held by the principal Tribes.—(Contd.)

Major division of tribe.	Got.		Amount of land owned by each tribe.			
	No.	Name.	Cultivated.	Uncultivated.	Total.	Revenue assessed (*máfí* and *jágír* included.)
Jat.—*Continued.*	22	Main ...	4,260	1,203	5,463	5,068
	23	Lonkas ...	1,308	755	2,063	1,113
	24	Jhorá ...	1,342	523	1,865	2,499
	25	Diwáne ...	3.079	1,309	4,388	5,223
	26	Denweyá ...	25,509	12,890	38,399	54,641
	27	Dabás ...	12,194	4,467	16,661	17,687
	28	Dúban ...	1,150	20	1,170	757
	29	Sardhe ...	3.468	1,361	4,829	6,876
	30	Charáwe ...	9.969	5,871	15,840	13,422
	31	Gádiyán ...	2,359	544	2,903	3,679
	32	Kanrwále ...	1,029	158	1,187	1,735
	33	Khatri ...	9,488	4,912	14,400	23,130
	34	Khábriyá ...	1,071	331	1,402	2,388
	35	Chikte ...	5,458	2,594	8,052	8 472
	36	Maur ...	1,319	1,169	2.488	2.556
	37	Barsir ...	2,099	1,051	3,150	2,624
	38	Malak Khúwále ...	9.985	4.213	14,198	16.753
	39	Nasire ...	3,535	1,594	5,129	6,580
	40	Mokhre ...	6,889	2,267	9,156	3,654
	41	Darál ...	2.758	943	3,701	4.416
	42	Mundtaur ...	2,199	455	2,654	3,203
	43	Lakre ...	2,932	511	3,443	1,050
	44	Kharab ...	1,014	413	1,427	1,641
		Miscellaneous ...	41,341	20,704	62,045	65,651
		Total ...	2,41,931	1,19,144	3,61,075	4,03,494
Chohan.	1	Antal ...	1,006	494	1,500	1.420
	2	Kachhwaya ...	1,560	1,936	3,496	2,794
	3	Bhál ...	1,399	1,088	2,487	3.417
	4	Subachh ...	1,567	701	2.268	2,323
		Miscellaneous ...	3,376	3,370	6,746	6,762
		Total ...	8,908	7,589	16,497	16,716
Rajput.	1	Chohán ...	5,430	5,095	10,525	9,741
	2	Jadbansi ...	1,527	133	1.660	2,169
	3	Tanwar ...	743	288	1,031	1,309
	4	Badhár ...	1,775	612	2,387	2,426
		Miscellaneous ...	406	69	475	564
		Total ...	9,881	6,197	16,078	16,209
Gujar.	1	Adháná ...	1,833	312	2,145	2,431
	2	Bhedáne ...	5,291	10,455	15,746	6,035
	3	Badhúdí ...	2,116	2,425	4.541	1,896
	4	Tanwar ...	2,309	6,469	8,778	1.684
	5	Chandailá ...	2,846	698	3,544	4,385
	6	Lohmor ...	1,175	384	1,559	1,491
	7	Sasumabe ...	1,127	1,040	2,167	2,083
	8	Ságrí ...	7,473	2,804	10,277	9,465
	9	Lolar ...	1,204	360	1,564	1,982
	10	Chhokar ...	3.829	1,688	5,517	6.460
	11	Kasane ...	1,685	1,050	2,735	3,115
		Miscellaneous ...	12,358	12,604	24,962	15,821
		Total ...	43,246	40,289	83,535	57,748

Statement of Lands held by the principal Tribes.—(Contd.)

Major division of tribe.	Got. No.	Got. Name.	Amount of land owned by each tribe. Cultivated.	Uncultivated.	Total.	Revenue assessed (*maafi* and *jágír* included.)
Sani.		Miscellaneous ...	1,021	195	1,216	2,088
Reah.	1	Tanwar ...	3,894	1,556	5.450	5,353
		Miscellaneous ...	1,493	1,444	2,937	2,460
		Total ...	5,387	3,000	8,387	7,813
Mali.	1	Banáral ...	1,532	378	1,910	2,286
		Miscellaneous ...	1,237	320	1,557	2,420
		Total ...	2,769	698	3,467	4,706
Gorwah.	1	Bhari ...	3,496	1,175	4,671	4,436
	2	Bargala ...	5,454	1,668	7,122	6,374
	3	Bharaddáj ...	1,407	175	1.582	2,398
	4	Rawat ...	2.107	327	2,434	3.449
	5	Gaur ...	1.771	323	2.094	3,029
		Miscellaneous ...	1,420	176	1.596	2,616
		Total ...	15.655	3.844	19.499	22.302
		Land owned by other Hindus ...	25,289	13,517	38,806	62,596
		Total owned by Hindús	4.40.286	2.38,605	6 78,891	7.34,154
Saiyid.	1	Búkhárí ...	5 948	2 319	8,267	9.834
	2	Girdbuzí ...	2.372	509	2,881	4,675
	3	Jafarí ...	2,068	559	2,627	1.298
	4	Kutbí ...	1.371	562	1,933	3,301
		Miscellaneous ...	1,575	191	1.766	1,967
		Total ...	13,334	4,140	17.474	21.075
Biloch.	1	And ...	1,406	196	1,602	2.632
		Miscellaneous ...	869	115	1,084	1,371
		Total ...	2.375	311	2,686	4 003
Pathan.	1	Ghori ...	1,234	1,051	2.285	2.707
	2	Bakhtyár ...	1,353	352	1,705	1,272
		Miscellaneous ...	1.145	205	1,350	2.174
		Total ...	3,732	1,608	5,340	6,153
Shaikh.	1	Saddíkí ...	7,103	3,383	10.486	11,199
		Miscellaneous ...	1,104	1,101	2,205	1,414
		Total ...	8.207	4.484	12,691	12,613
Meo.	1	Balút ...	1,038	713	1,751	1 322
	2	Tanwar ..	3,506	744	4,250	4,407
	3	Bhalyáne ...	4,090	1,542	5,632	5.114
		Miscellaneous ...	2,415	696	3,111	3,996
		Total ...	11,049	3,695	14,744	14.839

Chapter III, D.

Tribes and Castes and Leading Families.

Statistics and local distribution of tribes and castes.

Statement of Lands held by the principal Tribes.—(Contd.)

Major division of tribe.	GOT.		AMOUNT OF LAND OWNED BY EACH TRIBE.			
	No.	Name.	Cultivated.	Uncultivated.	Total.	Revenue assessed (*mafi* and *jagir* included.)
Taga Musalmán ...	...	...	11,152	6,218	17,370	17,698
Ját Musalmán ...	...	...	1,623	412	2,035	2,285
Chohán Masalmán ...	...	...	2,057	2,215	4,272	3,262
Rájput Musalmán ...	...	...	1,673	836	2,509	3,639
Gújar Musalmán ...	...	...	4,141	1,230	5,371	4,911
Gorwah Musalmán ...	...	...	5,426	654	6,080	7,708
Land owned by other Musalmáns ...	...	...	5,833	1,699	7,532	4,678
Total owned by Musalmáns ...	...	...	70,602	27,502	98,104	1,02,864
Total owned by Christians (*i.e.* by Govt.) ...	...	...	17,461	21,229	38,690	27,726
TOTAL DISTRICT ...	...	...	5,28,349*	2,87,336	8,15,685	8,64,744

* Of this the *Máfi* area is 8,932 acres.

Játs.

The table given above shows the principal Ját tribes from a revenue point of view, while the following figures give them as returned at the Census of 1881 :—

Sub-divisions of Játs.

Name.	Number.	Name.	Number.
Uthwál ...	... 6,619	Sahráwat ...	... 4,292
Ahláwat ..	... 1,746	Ghatwál ...	... 4,434
Deswál ..	... 720	Khatri ...	... 11,098
Dehia ...	... 14,334	Mán ...	... 1,902
Dalál ...	... 1,850	Nain ...	... 928
Dágar ...	... 8,558	Tának ...	... 1,211
Dhillon ...	... 6.852	Jarárnah ...	... 3,036
Ráthi ...	... 1,476	Sakandi ...	... 2,405
Ráwat ...	... 2,669		

The Hindu Játs may be distinguished broadly into two divisions—those of the north and middle of the district, and those of the south. The latter centre mainly round Ballabgarh. Their historic traditions are connected with the Ját rájás (see Chapter VI.) who had their capital there, and they have a lingering sentiment about Bhartpur, the seat of their greatest representative. The northern men, on the other hand, have, so far as is known, nothing in common with this history. The great division here is into two *dharráhs* or factions called Dahiyás and Ahúlánás. This division runs right through Sunipat, and more faintly through Delhi *tahsíl* and is so firmly rooted in the popular mind, that Muhammadans

The Dahiyás and Ahúlánas.

Chapter III, D.

Tribes and Castes and Leading Families.

even class themselves with one or the other party. Thus the Muhammadan Gújars of Pánchi Gújrán called themselves Dahiyás, and so do all the neighbouring villages; though no one appears able to give reasonable explanation why. The historical tradition of the origin of the Dahiyás is embodied in a characteristic story as follows:—

Traditional origin of the Dahiyás.

The son of Rájá Pirthwi, Haryá Harpál, being defeated in battle by the king of Delhi, took refuge in a lonely forest, which, from the number of its trees, he called Ban-auta, now corrupted into Barautá in Rohtak. There he ruled, and his son Dhadhíj after him. Dhadhíj one day, in hunting, chanced upon a certain pond or tank near Pogthalá in the same district, where the Ját women had come together to get their drinking water. Just then a man came out of the village, leading a buffalo-cow-calf with a rope to the pond to give it water. The animal, either from fright or frolic, bounded away from the hand of its owner, and he gave chase, but in vain. Neighbours joined in the pursuit, which was nevertheless unsuccessful, till the animal in its headlong flight came across the path of a Játní going along with two *gharras* of water on her head. She quietly put out her foot on the rope, which was trailing along the ground, and stood firm under the strain which the impetus of the fugitive gave. The calf was caught, and Dhadhíj, looking on with admiration, became enamoured of the stalwart comeliness of its captor. Such a wife, he said, must needs bear a strong race of sons to her husband, and that husband, notwithstanding the fact of her already being married, he forthwith determined to be himself. By a mixture of cajolery, threats, and gift-making, he obtained his desire, and the Játní married the Kshatri prince. By her he had three sons, Tejá, Sahjá, and Jaisá. Dhadhíj gave his name to the Dahiyás, and his children spread over the neighbouring tracts, dividing the country between them. Tejá's descendants live in Rohtak, Sahjá's partly in Rohtak and in 12 villages of Delhi, Jharaut, Jharauti, Anandpur, Rohat, Kakrohi, Kheri Manájat, Malhá, Mazrá, Hasany-Kárpur Tihará kalán, Tajpur Tihárá khurd, Kheri Dahiyá, Bhatgáon,, Nasirpur Bángar. Jaisá's descendants live in Rohtak, and in the following 16 villages in Delhi—Mandaurá, Mandauri, Turkpur, Bhatgáon, Bhatánah, Jáfarábád, Bidhnauli, Garhi bálá, Fatehpur, Abbáspur, Bhuwápur, Mohammadábád, Koali, Náhrah, Náhri, Hilálpur, Saidpur. Another tradition derives the name Dahiyá from Dadhrérá, a village in Hissár, which it thus makes the starting place (*nikás*) of the tribe.

The Ahúláná tradition.

The Ahúláná tradition is not so picturesque as that of the Dahiyás. Their origin is traced to Rájpútána. Their ancestor, whose name is not known, was coming Delhiwards with his brothers Môm and Sóm in search of a livelihood. They quarrelled on the road, and had a deadly fight on the banks of the Ghátá *naddi*. Móm and Sóm, who were on one side, killed their nameless kinsman, and came over to Delhi to the King there, who received them with favour, and gave them lands; to Som, the tract across the Ganges, where his descendants live as Rájpúts now in Muzaffarnagar and Meerut. Móm was sent to Rohtak, and he is represented now by Játs there, in Hánsí, and Jhínd. The Rohtak

Chapter III, D.

Tribes and Castes and Leading Families.

party had their head-quarters in Ahúláná in that district, and thence, on account of internal quarrels, they spread themselves in different directions, some coming into the Delhi district. Dates of these migrations are misty, and in fact are considered unimportant, for things of this kind are always said to have happened an immemorial time ago. The division into Deswálás and Pachamwálás, which is sometimes mentioned as belonging to the Játs, is not known in Delhi. Lists of villages belonging to the Dahiyá and Ahúláná sections will be found in the Settlement report.

The Delhi Gújar.

The most characteristic tribe of the district, next to the Ját, is the Gújar; and indeed, from the fact that there are a few Gújar villages near the city itself, we hear more of the Delhi Gújar than of the Delhi Ját. A good deal has been written about the origin of the tribe, but very little is known. It appears probable that Gújars have lived in this part of the country from very remote periods; and they occupied the hills because no one else cared to do so, and because their solitary and inaccessible tracts afforded better scope for the Gújar's favourite avocation, cattle-lifting. But though he thus has possessed two qualifications of a Highlander, a hilly home, and a covetous desire for other people's cattle, he never seems to have had the love of fighting, and the character for manly independence, which distinguish this class elsewhere. On the contrary, the Gújar has generally been a mean, sneaking, cowardly fellow, and it does not appear that he improves much with the march of civilization, though of course these are exceptions: men who have given up the traditions of the tribe so far as to recognise the advantageousness of being honest (generally). The rustic proverb-wisdom is very hard on the Gújar. "Make friendship with a Gújar when all other tribes have ceased to exist." "Solitude is better than a Gújar (for a companion), even though it be such wretched solitude that a wild beast's jungle is better." In other words, the company of wild beasts is preferable to that of a Gújar. His habit of thieving, and that of the Ránghar also are described in very curt terms: "The dog, and cat two.—The Ránghar and Gújar two. If these four (creatures) are not (near): then go to sleep with your feet streatched out (*i.e.*, in ease and security)." His character for industry, and general eligibility as a neighbour, is indicated by the rhyme:—"May the place remain uninhabited, or dwelt in by a Gújar!"

Mr. Lyall, in his Kángra Settlement Report, Appendix V Proverb No. 18, gives a somewhat different meaning to the phrase. But the optative given here is indicated by the following anecdote: King Toghlak was building his fort at the same time that the Pír Nizám-ud-dín was making a staircase well (*báolí*). The holy man's workmen laboured day and night, but those of the king required rest. Filled with envy, the king sent orders that no *banyá* should supply the *pír* with oil, so that the workmen might have no light. However, the miraculous power of their employer enabled the night-workers to burn water instead of oil, and in return to the message from the king, the saint uttered the anathema quoted. Toghlakábád is now a Gújar village. The chief centres of the Gújar tribe are

Chapter III, D.

Tribes and Castes and Leading Families.

The Delhi Gújar.

Tigáon, in Ballabgarh, Mahrauli and the villages to the south of it in the same *tahsíl*, and Pánchi Gújrán in Sunipat, where the men are Muhammadans, and are worse cultivators even than their Hindu kinsmen, who themselves are not much in this way. In Delhi the men of Chandráwal and one or two other villages are Gújars, and all the *chaukidárs* of the civil station are drawn from this tribe, who, for the consideration of five rupees per month, waive their prerogative of house-breaking. So far fixed has this discreditable black-mail become that the police virtually recognise it, and in one or two cases where a rash resident attempted to dispense with the services of a *chaukidár* his house was promptly plundered. Such at least is the idea in Delhi. There is perhaps some difference of morality in favour of the Gújars round about Tigáon, as compared with the men of the hills. The canal (curious fact) has rendered cattle-lifting more difficult, as its banks in Ballabgarh *tahsíl* are rather steep, and the bed lies low, and the Gújar cannot easily get the cattle he is driving off across it except at the bridges, which of course delays his operations and increases the chance of their being detected. Tigáon has a very heavy *chaukidári*-tax to pay.

Bráhmins of the district.

A more pleasing subject is the Bráhmin. He is not a first-rate agriculturist, but far better than the Gújar, and in character he is quiet and peaceable, honest and not much given to litigation. The proverb says of him, however, rather unfairly : "It is as common for a Bráhmin to do ill, as it is for famine to come in the Bágar tracts," (*i.e.* the dry tracts toward Bikanir and Sirsa.) Yet his general peaceableness is testified by the admonitory rhyme :— "It is a bad thing for a Bráhmin to wear a knife."

Tagahs.

There is a tribe, called Tagahs, originally Bráhmins, but who do not now intermarry with them. They say that they differ from the Bráhmin only in not habitually collecting alms, which they have given up (*tyág-dena*), and hence their name. As Hindus they are fair cultivators, but when made into Muhammadans they, as is usual, deteriorate. The Tagahs are found mainly in Sunipat, but there is Fatehpur Tagah in the south of Ballabgarh. The Bráhmins are spread pretty fairly over the district. Their largest village is Tilpat in Ballabgarh, but they are co-sharers with Játs in the first class estates of Bhatgáon and Murthal in Sunipat, and in other places.

Ahírs.

The Ahírs are of some importance. Their tradition claims for them a Rájpút origin, and the story goes that, when the incarnation of Krishn took place in Bindrában, some demon carried off the cattle of an ancestor of the tribe, and also the man himself while tending them. Krishn, by his omnipotence, created a man for the purpose of tending the cattle, and brought back the cattle for him to take care of, and his descendants were henceforth to be called Ahírs. This is a curiously Irish story, and does not deal well with the original herdsman ; but another tradition steps in to add that the defeated and disappointed demon, when he saw his evil intentions thwarted, brought back the abducted cattle-driver, so that he and Krishn's man have between them to account for the tribe. Its present representatives are a quiet, orderly set of men, first-class cultivators, and altogether unobjectionable to a degree hardly equalled by any other class. Yet the proverb, (made probably long ago),

Chapter III, D.
Tribes and Castes and Leading Families.
Ahírs.

is fiercer on the Ahír almost than on any tribe :—"Don't rely on a jackal, the *lámp* (a kind of grass), or an Ahír, but endure a kick from a Rájpút, or from a hill, (*i.e.*, a stumble,)":—and still worse : "all tribes are God's creatures ; but three kinds are merciless ; when a chance occurs they have no shame, a whore, a *banyá*, and an Ahír." Their villages lie mostly near Najafgarh, where they have quite a little colony ; but there is also a smaller set of Ahír villages near Bádli.

Rájpúts.

The Rájpúts in the district are for the most part scattered ; they are not good cultivators, but are not of great importance any way in Delhi. The Gaurwas in Ballabgarh have several villages near Ladhauli ; they are said to be degenerate Rájpúts, who make second marriages (*karáo* or *karéwa.*) They are especially noisy and quarrelsome, but sturdy in build, and clannish in disposition. The Chohāns are more respectable than the Gaurwas, and are really Rájpúts, as they certainly are in most other places. They are the best cultivators of the tribe, and are otherwise decent and orderly. They own a few villages near Delhi on the south, and there is a small colony of them near Jakhaulí in Sunipat, where Manphul *záildár* is a Chohán. The following figures show the principal Rájpút tribes, as returned at the Census of 1881 :—

Sub-divisions of Rájpúts.

NAME.	NUMBER.	NAME.	NUMBER.
Bhatti	.. 5,935	Khichi	... 5,100
Panwár	... 566	Gaurwa	.. 4,912
Túnwar	... 1,038	Gor	... 509
Jádo	... 1,505	Ghalot	.. 592
Chohán	.. 3,658	Samáwat	.. 1,254
Rawat	.. 1,323		

Meos.

The Meos are not numerous in Delhi, but they have a compact following in the south of Ballabgarh, having pushed up there from Merval. For particulars of this interesting tribe, reference may be made to the Gurgáon Gazetteer.

Sayads.

The Sayads are very few, but they hold, in proportion to their numbers, a large extent of land, as there are several single proprietors who by themselves hold villages ; as, for instance, Ahmad Shafi of Farídábád, who owns three villages in his own *tahsíl*, and Alipur in that of Delhi. In Sunipat, too, there are several families, who hold their heads rather high. As cultivators they are worthless.

Leading Families.

The following families in the city of Delhi are worth notice :—

1. Mirza Suleman Sháh's family and the ex-Royal family.
2. Mián Muinúddín's family (Pír of the Kings.)
3. Hakim Mahmúd Khán.
4. Hakim Muhammad Husain Khán.
5. Lalah Srikishan Dás Gurwálá, Banker, *Bania.*
6. Lalah Parasdás, *Saraogi*, Banker.
7. Lalah Jagannath Naharwala, Banker, *Bania.*
8. Lalah Ramkishan Dás, Banker, Khatri.
9. Lalah Dharam Dás.

Mirza Suleman Sháh is descended from Emperor Farrukhsere. Before the Mutiny, Mirza Hidayat Afza *alias* Mirza Ilahi Bakhsh was the leading member or head of the family. One of Mirza Ilahi

Bakhsh's daughters was married to Mirza Fatehúlmúlk, the last heir apparent of the ex-King, who died before the Mutiny. Mirza Ilahi Bakhsh did good services to the British Government during the Mutiny, and was rewarded by the release of his estate, and got a pension of about Rs. 1,200 a month; he died in March 1878, and left three sons. Mirza Sulemán Sháh, the eldest, who is now the head of the family, and gets half the pension of his father, and is also in possession of a *jágír* in village Aghwanpúr. The second son, Mirza Suráyá Jah, gets Rs. 300 a month out of the pension of his father, and is married to the daughter of the ex-Nawáb of Tank. The third son or the youngest, Mirza Ikbal Shah, gets Rs. 150 a month out of the pension of his father. Among the members of the ex-Royal family, Mirza Farkhúnda Jamal, son of Mirza Fatehúlmúlk, the heir apparent of the ex-King and grandson of Mirza Iláhi Bakhsh by the mother's side, is worth notice. He gets a pension of Rs. 161 from Government.

Mián Muinuddin is descended from Shah Nizamúddín, Aurangabádi, who was Pír of Alamgir II. The most famous saint of this family was Maulaná Fakhrúddín, Pír of Shah Alam; his followers are in very large numbers in the Panjab. Shah Suleman Sahab was one of his Khalifas, who was a very famous Pír in the frontier district of Dera Ghazi Khán, whose son Mían Ala Bakhsh is still alive and much revered. Maulana Kutbúddín, son of Maulana Fakhr, was the Pír of Akbar Shah II, and Maulana Ghulam Nasiruddin *alias* Kale Sahab, son of Maulana Kutbúddín, was the Pír of the ex-King Bahadur Sháh. After the death of Mían Kale Sahab, Mían Nizamuddin was the head of the family. Mían Kale Sahab had four sons, Nizamuddín and Muinuddin by the first wife, and Wajiuddin and Kamaluddín by the second wife, who was a princess of the Mughal family. Mian Nizamuddín had a *jágír* in Haidarábád, Dekkan, to which Mian Muinuddín has succeeded. The other two sons have a separate *jágír* in Haidarábád. Wajíuddín is dead, and Mían Kamaludín is in possession of it. This family is highly revered by all classes.

Hakim Mahmúd Khán—Khwaja Muhammad Kasim and Khwaja Muhammad Hashim, the ancestors of Hakim Mahmud Khán, came from Kashghar with the Emperor Babar, settled in Haidarábád, Dekkan, and died there. In the reign of Akbar the great, Mulla Ali Kari and Mulla Ali Daúd were invited to Agra or Akbarábád, and were the most learned men of Akbar's *Darbar*. Up to the present day these two Mullás are considered great authorities because of the commentaries which they wrote in Arabic on difficult ancient books and physics. Hakim Fazal Khán, son of Mulla Ali Daúd, was the first man of the family who became a physician, and was a famous physician of Akbar's Court. Hakim Muhammad Wasal Khán was physician to Aurangzeb. His two sons, Muhammad Akmál Khán and Muhammad Ajmál Khán got a *jágír* of two lacs a year in the Patna district, and a monthly pay of Rs. 3,000. After Akmál Khán's death, his son Muhammad Sharif Khán got a *jágír* of eight villages—Palri, Palra, Mukímpúr, &c., in the *parganas* of Panipat and Sunipat, aggregating in value Rs. 25,000. Hakim Sharif Khán in his old age, and

Chapter III, D.
—
Tribes and Castes and Leading Families.
Leading Families.

in the reign of Sháh Alam, got his *jágír* transferred to his six sons; and the *sanad* has the signature of the British authorities, which Hakim Mahmúd Khán has in his possession. After the death of Hakim Sharif Khán, the British Government confiscated the *jágír* and gave a pension to his six sons in lieu of it. Hakim Sadik Ali Khán, the son of Sharif Khán, besides this pension had three *jágír* villages in the Mirath District—Dasna and two others. Hakím Sadik Ali Khán had three sons,—Ghulam Muhammad Khán, Mahmúd Khán and Murtaza Khán. Ghulam Muhammad Khán is dead. Hákim Mahmúd Khán is now the head of the family; he is a famous physician. He is a man of great learning, and is descended from a family of high esteem in the courts of the Mughal emperors.

Hakim Muhammad Husain Khán traces his descent from Nawab Khán Khanan Mahabat Khán, a great personage in the reign of Akbar the Great. The Hakim's grandfather, Hakim Razi Khán, was a famous physician in Shah Alam's time. The Hakim's father and eldest brother, Fakhruddin Hasan Khán and Raziuddin Hasan Khán, were great physicians in the court of the last Mughal king. Hakim Muhammad Hussain Khán is a native physician of renown in the city, and is an honorary magistrate in the city.

Lala Sri Kishan Dás, Gurwala, Banker, belongs to an old family of bankers in the city, which is well known in every part of India and in other countries. The ancestor of this family who got the name of Gurwálá was Lalá Radha Kishan. In 1732 when Ahmad Sháh Abdali invaded India this family first came into notice, and has since continued famous. Lalá Radha Kishan had nine sons—(1) Bahadur Singh, (2) Zaokiram, (3) Sheonath, (4) Mohkam Singh, (5 Jagannath, (6) Magniram, (7) Kedarnath (8) Girdhari Lal. and (9) Khushal Rai; of these nine the first five died without issue. Of the sixth, there is one son, Shankar Das, living; of the seventh there is one son, Kallú Mal, living; of the eighth there is one Munnaji living; but all these are of no importance. The present family is descended from the youngest son, Khushal Rai, whose son was Mathra Dás. His son was Bakhshi Ram, whose son was Ramji Dás. Narain Dás was the son of Ramji Dás, and adopted Srikishna Dás, who is now the head of the family. They were all famous and wealthy bankers. The present head of the family is a lad of about 18 years of age.

Lalá Paras Das.—This man is the head of the old *Saraogi* Banker family. His great grandfather Lalá Harsukh Rai did good service to the British Government in the reign of Shah Alam. He built the famous Jain temple at Delhi which cost him eight lacs of rupees. For the good services of Lalá Harsukh Rai, his son Shugan Chand got a *jágír* of three villages, Alipur, &c., from the British Government in Lord Lake's time, for which the Lalá possesses a *sanad*. His father, Girdhar Lal, did good service in the Mutiny, for which he possesses very good certificates; Lala Paras Dás is a well educated and respectable man, and a man of large property.

Lalá Dharam Dás, Banker.—Gulab Rai was the head of the family, who 200 years ago rose to some importance. He came from the Saharanpur district and settled in Delhi. He had two sons,

Chapter III, D.

Tribes and Castes and Leading Families.

Leading Families.

Mehr Chand and Megraj. The present family is descended from Mehr Chand. His son Totaram had four sons, Sewaram, Sangam Lal, Mathra Dás, Salig Ram. Lalá Saligram left four sons, Lalá Dharm Das, Lala Bhagwan Das, Lalá Ajuddhia Parshad, and Lalá Ishri Parshad. Lala Saligram was the Treasurer of Government Treasuries in the Delhi Division. A few years ago the four brothers divided the property and separated. Lala Dharm Dás, the eldest, may be considered the head of the family, though Lala Ishri Parshad, the youngest, is at present the Government Treasurer in the three districts of the Delhi Division. Lala Saligram and Mathra Dás did good service to Government in the Mutiny and got Wazirpúr village in *jágír;* which has lapsed on their death, but proprietary right in 9½ *biswas* in this vlllage still continues.

Lala Jagan Nath, Nahrwala, Banker.—This man is the head of an old banking firm of Delhi. The first man of importance in this family was Lala Moti Ram ; his son Lala Khushali Ram and his grandson Makkhan Lal were rich bankers. Makkhan Lal's son, Lala Ramjí Mal, served Government in the Commissariat Department at the time of the Bharatpur and the first Kábul wars, for which the Lala possesses testimonials. Lala Ramjí Mal's son, Lala Narain Dás, was a banker of some renown and great wealth. Lalah Jagan Nath, son of Narain Dás, has closed the banking firm but is wealthy. He is respected in the city and leads a quiet life.

Lala Ramkishan Dás, Banker.—The first men of any importance in this family were Lala Pala Mal and Mutasaddi Mal, who used to supply shawls, &c., to the ex-king's Toshakháná and were renowned brokers. Lala Chhúnna Mal, son of Mutasaddi Mal, rose to some eminence, and after the Mutiny was appointed Municipal Commissioner and Honorary Magistrate and got the title of Rái and a reward from Government for his good services in the Mutiny. He died in January 1870, and was succeeded by Lala Umrao Singh, who got his place as Municipal Commissioner and Honorary Magistrate, and got the title of Rái Báhádúr at the time of the Imperial Assemblage in 1877. Rái Báhádúr Umrao Singh died in 1879. He was a clever man ; he erected some machines in his house and constructed some electric telephones for the Delhi Police Stations.

Lala Ram Kishan Dás succeeded Rai Bahadúr Umrao Singh as head of the family and is an Honorary Magistrate. This family is considered the wealthiest in the city.

The principal families in Sunípat are: (1st) the Sayad family of Sunípat; (2nd) the Brahman family of Gadhi Brahmanán, and a Brahman family of Sunípat,

Sayad Muhammad Zaki's ancestor, Sayad Muhammad Yusuf, is said to have been the Pir of Shah Alam, whose son Muhammad Islam Khán was the Governor of Gujrat. Sayad Muhammad Zaki, who is sixth in descent from him, is a landed proprietor and *jágírdár,* and is a man of some influence among the Muhammadans of the town of Sunípat.

Kanwar Prithi Singh.—His great grandfather Sheo Nath Singh, rose to eminence in the reign of Shah Alam, and got the title of *Rája* with a small *jágír* which has descended to Prithi Singh, who

Chapter III, D.

Tribes and Castes and Leading Families.

Leading Families.

did good service to Government during the Mutiny and got some land in the town of Sunípat as *máfi*. Prithi Singh is a landed proprietor and *jágí-dár* in Sunipat and a man of some influence.

Pandit Wazir Chand.—His grandfather Pandit Ganeshi Ram, was a man of influence in Sunípat. His son Pandit Nanak Chand served Government as *thanadar*, *ziladár* and Deputy Collector of the Western Jamná Canal. During the Mutiny Nanak Chand did good service to the British Government, for which he got a *jágír* of three villages—Mughalpur khurd, Hareoh and Jhanjhauli, worth Rs. 3,000. After his death half the *jágír* continues to his son Pandit Wazir Chand, who is now an Extra Assistant Commissioner in the Punjab. Pandit Wazir Chand's cousin, Dewan Singh, is a Deputy Collector on W. J. Canal, Hansi Division.

The principal families in Ballabgarh *tahsíl* are:—

(1.) The ex-Rájá Nahar Singh's family.
(2.) The Sayad family of Moihna.
(3.) The Sayad family of Faridábad.
(4.) The Shekh family of Faridábad.

The ex-Raja of Ballabgarh's family.—This was a Ját family of Got Tawatia of Aláwalpur. (See Chapter VI).

Mir Ashraf Ali of Moihna.—His ancestor Sayad Shahabuddin, came with Shahabuddin Ghorí from Gurdez and was appointed Governor of Kára Mánakpur, where he settled. One of the family, Sayad Chhajju, inhabited Bhaunkar in the Gurgáon district. As the family increased, one Muinuddin founded Moina after his name, which has been corrupted into Moihna, the present name of the village. Sayad Afzal Ali, grandfather of Sayad Ashraf Ali, entered the Indian army and was a *resaldár*. He left two sons, Mir Hidayat Ali and Mir Jáfir Ali. They were both *resaldárs* in the Indian Army. During the Mutiny Mír Hidayat Ali and some of his relations who were also in the army were on leave. They assisted the British officials who came to their village during the Mutiny with Mr. W. Ford, the Collector of Gurgáon, and escorted them safe to Delhi, and joined the British Army on the Ridge, for which loyal services Mir Hidayat Ali, Resaldar Sardar Bahadúr, got the village of Moihna in *jágír*. Many of his relations are still in the army. Sayad Barkat Ali, his nephew, is a *resaldár*. Mir Masum Ali, his other nephew, was an Inspector in the Salt Customs Department and has retired on pension. Mir Ashraf Ali is the present head of the family, and the *jágír* continues in his name.

Mir Ahmad Shafi of Faridábád.—The ancestor of this family, Sayad Afzal Ali, was called from Bokhara by the Emperor Jahangir at the request of Sayad Múrtaza *alias* Shekh Farid, the founder of Faridábád town, and settled in Faridábád. He got a *máfi* of 400 *bighas* of land with two wells and a large garden. Since then the family has lived in Faridábád. Some of the family have served in Raj Bharatpúr in respectable posts. Mir Iftikhar Ali still gets a pension of Rs. 50 a month from the Bharatpúr Raj. Mir Amjad Ali, Resaldár, the last head of the family, was in the Indian Army and did good service during the Mutiny. For his loyal service he received three villages in the Bulandshahr district. He also bought

several villages in the Delhi district. He was a Resaldár Major Sardar Bahadúr in the Indian Army. He died about six years ago. His son, Mir Kásim Ali, who was an Honorary Magistrate in the city of Delhi, died at the same time, and was succeeded by his son Ahmad Shafi, a minor, who is now the head of this family, and the owner of a large landed property in the Delhi district, and of three villages in the Bulandshahr district.

Shekh Abdurrasul of Faridábád.—His ancestor Kazi Malik Ali, who is said to have been the head Kazi of Herat, came to India in the reign of Ghiásuddin Balban, settled in Panípat, and got a *jágir*. He was the founder of the Ansari family of Panípat. The Faridábád Shekh family is a branch of the Ansari family of Panípat. Muhammad Azam, one of the family, was the Governor of Mirath; Shekh Shakarulla, the grand son of Muhammad Azam, came to and settled in Faridábád, and got an assignment of some land and two wells. When the Rajás of Ballabgarh became powerful, one of this family, Shekh Rahimulla, got the post of Treasurer under Rája Híra Singh. Shekh Rahimulla had three sons, Abdulla, Amanulla and Kudratulla. Shekh Abdulla was also Treasurer in Ballabgarh Raj. One of his sons, Ghulam Haidar, was *resaldár* in the Indian army, and for his faithful services got a *máfi* of 4,000 *bighas* of land in village Talwa, district Sirsa, which still continues. His son Abdulghani is an Extra Assistant Commissionor in the Ráwalpindi district. One of the grandsons of Shekh Abdulla, Abul Hasan, was a *tahsildár* in Oude and has now retired on a pension. Sheikh Ilahi Bakhsh, the eldest son of Shekh Amanulla, was in Raj Ballabgarh, and was a *vakil* from the Raja in the Court of the British Resident at Delhi, and was an influential man in Faridábád. Shekh Abdurrasul, the youngest son of Shekh Amanulla, served the Government as *thánádár*, *tahsildár* and Extra Assistant Commissioner in the Punjab, and has retired on a pension of Rs. 218 a month. He is the present head of the family and holds some landed property in Faridábád.

In the Delhi *tahsíl* there is one family of Játs of some importance. The present head of the family is Faujdar Baldeo Singh of Mitraun. This family is related to the Rájas of Bharatpúr. Chaudhri Hukmi Singh of Mitraun was the first man of this family who acquired influence among the *zamindárs* of the surrounding villages. His son Dayaram became an important man. In the time of the Marhatta raids Dayaram got five villages in *jágir* from Sindhia, *viz*, Kaloi, Salana, Salam, &c., in the Rohtak district, and was *suba* of Rohtak. At an early period of the British rule he got Mitraun in *jágír*, which is said to have continued till his death. Dayaram had four sons: (1) Thakurdás, (2) Mittar Sain, (3) Charan Singh, and (4) Lachman Singh. After Dayaram's death the *jágír* was confiscated, and his two sons, Thakúr Dás and Charan Singh, got respectable posts in the Bharatpúr Raj, and Charn Singh's daughter was married to Balwant Singh, the Rája of Bharatpúr; and the sons of the four brothers got high posts in the Ráj. The principal of them were Ratan Singh, son of Charan Singh; Gopal

Chapter III, E.

Village Communities and Tenures.

Singh, son of Mittar Sain, and Baldeo Singh, son of Lachman Singh. Luchman Singh, the father of Baldeo Singh, enlisted in the Indian Army as *resaldar* in the first Afghan campaign, and after his return from Kábúl remained in the army. During the Mutiny Luchman Singh was in the British forces before Delhi. His son Baldeo Singh and two nephews, Ratan Singh and Gopal Singh, did good service to the British Officers in Bharatpur, for which they got a *jágír*. Baldeo Singh got Kharkhari rúnd in Delhi district; Ratan Singh and Gopal Singh got the villages Alta and Sáwar in Bulandshahr district; Baldeo Singh, the present head of the family, resides in Mitraun and is a landed proprietor.

SECTION E.—VILLAGE COMMUNITIES AND TENURES.

Village tenures.

Table No. XV shows the number of villages held in the various forms of tenure as returned in quinquennial Table No. XXXIII of the Administration Report for 1878-79. But the accuracy of the figures is more than doubtful. It is in many cases simply impossible to class a village satisfactorily under any one of the ordinarily recognised tenures; the primary division of rights between the main sub-divisions of the village following one form, while the interior distribution among the several proprietors of each of these sub-divisions follows another form which itself often varies from one sub-division to another. The following figures show the classification adopted at the recent Settlement. :—

Statement of Tenures.

Tahsil.	Tenures.					
	Zamindari.		Pattidari.		Bhaiyachara.	
	Land-lord.	Communal.	Pure.	Mixed.	Pure.	Mixed.
Ballabgarh ...	15	29	8	130	2	99
Delhi ...	9	35	13	147	2	82
Sunipat ...	2	6	4	37	...	190
Total of the District ...	26	70	25	314	4	371

The terms 'perfect' and 'imperfect,' or, as they are sometimes used 'pure' and 'mixed,' deal with the degree of separation only, not with the degree of thoroughness or uniformity of the principle governing that separation; so that the classification does not tell as much as could be wished. No difference for example is marked by it between the *thorough going pattidári* village, and a village in which, though its primary divisions of *tarafs*, *pattis* or *pánás* are based on ancestral shares, the individual proprietors of each *patti* among themselves hold by *bháyachára*, *i.e.*, base their tenure on possession. Yet such a difference seems quite as important as the fact of there being, or not being, common land undivided,

Chapter III, E.

Village Communities and Tenures.

Village Tenures.

A further sub-division of *pattidari* villages as follows may therefore be added. :—

1.—Thoroughgoing, *i.e.*, as between *tarafs*, and in the *tarafs*, as between proprietors, also *pattidári*	189
2.—As to primary divisions *pattidári*; and within those divisions *bháyachára* (vulgo *pattidári bháyachára*) ...	147
3.—As to primary divisions *páttidári*; within those divisions *zamindári bilijmál*	3
Total	339

The 26 *zamindári wáhid* villages are distributed as follows:—in Delhi 9; in Sunipat 2; in Ballabgarh 15. Of the nine Delhi villages, four belong to Government, Andhauli, Kaithwará, Khandrat Kalán and Shakarpur, but the last-named has disappeared under the diluvion of the river. The others are Hamidpur, Khánpur, Kuraíní, Khor Punjab, and Sikandarpur. In Sunipat, the two villages are Harsána Kalán and Bahálgarh. In Ballabgarh, Government owns four entire villages, Ságarpur, Sihí, Shikargah Tilori, and Yahyanagar, and the eleven others are Tájpur, Karnhera, Majhaolí, Ballabgarh, Daulatábád, Sahopura, Maujpur, Bagh Ghálib, Tilori Bángar, Chírsi and Chandaolí. The last three have been recently purchased by the family of Amjad Ali of Faridábád, as is noted under the section dealing with Government property. Not one of these villages is held by Muhammadan donees from the Delhi emperors. The title in each case is very recent, and indeed rarely is any right found going further back than the Mutiny, and not a few represent gifts from Government for services done at that critical time.

Riparian custom.

As the river runs down on one side of the whole length of the district, the yearly di-alluvion work forms an important feature of the revenue administration. The Jamná, however, is not nearly so violent or capricious as the Panjab rivers generally speaking are, and its incursions are rarely sudden or unforeseen. There are altogether 92 villages in the district at present bordering on the stream; 24 in Sunipat; in Delhi 24; and in Ballabgarh 44. The boundary for revenue purposes throughout is the deep stream of the river, but for proprietary right the custom is various. In Sunipat for all the 24 villages, the deep stream determines the property (*machha súí*); in Delhi only seven use this rule; in the remaining 17 villages, the proprietor keeps his land whether on this side the stream or not (*mu'aiyan-ul-hadd*). In Ballabgarh, nine follow the deep stream, and 35 the fixed boundary. In only two cases is it the practice in such circumstances for the community to compensate the proprietor by the gift of village common land. In one the pecuniary loss of having to pay the revenue is borne by the village. In one the proprietor gets in compensation land (if any) recovered from the river. In six the unfortunate is given leave to cultivate the common land as a tenant.

Proprietary tenures.

Table No. XV shows the number of proprietors or shareholders and the gross area held in property under each of the main forms of e nure, and also gives details for large estates and for Government grants and similar tenures. The figures are taken from the quinquen-

Chapter III, E.

Village Communities and Tenures.

nial table prepared for the Administration Report of 1878-79. The accuracy of the figures is, however, exceedingly doubtful; indeed, land tenures assume so many and such complex forms in the Panjáb that it is impossible to classify them successfully under a few general headings.

Superior proprietors.

Besides the ordinary proprietary right, as represented by the right to engage for the Government revenue, there are in six villages in Ballabgarh *superior proprietors,* who take a percentage on the revenue paid by the *biswahdars,* but exercise for the most part no other right in the property. These villages are Phaphundah, Dígh, Tájupur, Ajraunda, Alipur and Sadpura, and the percentages paid in them to the superior proprietors (*ála málikán*) are diverse, varying in amount from 5 per cent. to 10 per cent. Full particulars will be found in a statement embodied in Mr. Maconachie's report.

Tenants and rent.

Table No. XVI shows the number of tenancy holdings and the gross area held under each of the main forms of tenancy as they stood in 1878-79, while Table No. XXI gives the current rent-rates of various kinds of land as returned in 1881-82. But the accuracy of both sets of figures is probably doubtful; indeed, it is impossible to state general rent-rates which shall even approximately represent the letting value of land throughout a whole district.

Extent of land cultivated by tenants.

The land held in cultivation by tenants throughout the district is 179,992 acres, or 34·67 of the whole cultivation. This leaves 339,425 acres, or 65·33 per cent. for the personal or *khud-kásht* tenure of the proprietors. This average proportion, however, is not sustained in some parts, and indeed depends much on caste and traditional habit Where there are tenants with right of occupancy, of course the facts are rendered obscure, as referring to a state of things perhaps long ago, or modified by adventitious influences that we cannot accurately estimate. But the proportion of land held by tenants-at-will is more significant, and shows in several ways how the close proprietorship of the land works. Here will be found a small body of proprietors not apparently possessing the physical vitality to multiply sufficiently to furnish cultivating proprietors for the whole cultivated area of the village : there, perhaps in the very next village, the robust virility of the proprietary stock asserts itself by affording *páhi-kásht* (non-resident) tenants all round to the neighbouring estates. So long has this been going on that not unfrequently the proprietors of one village are tenants with right of occupancy in another. The Ját is largely *khud-kásht,* to use a convenient abbreviation of expression ; his strong working hands are loth to let go any of his holding ; while the Muhammadan, especially the Sheikh, is willing to eat a little less and let his muscles lie at rest. This is one of the principal causes of the considerable variation in the proportions held by proprietor and tenant respectively in different parts. Near Delhi, this proportion is often ¾ of the village cultivation ; while, in some Ját villages of the more prosperous and healthy kind, the whole area is in the hands of the owners with the exception of a few acres.

The principal facts regarding the rent and cultivation of land in the district, as ascertained at the recent Settlement are given on the next page.

Chapter III, E.

Village Communities and Tenures.

Extent of land cultivated by tenants.

	Ballabgarh.		Delhi.		Sonipat.		Total.	
	No. of holdings.	Area.	No. of holdings.	Area.	No. of holdings.	Area.	No. of holdings.	Area.
Occupancy tenants. Cash rent ...	5,119	28,482	3,781	17,685	3,273	9,270	12,173	55,437
Occupancy tenants. Rent in kind ...	2	12	460	1,810	13	45	475	1,867
Tenants-at-will. Cash rent ...	8,266	28,995	10,822	33,362	19,681	48,697	38,769	1,11,054
Tenants-at-will. Rent in kind ...	163	1,049	1,450	7,183	1,000	3,402	2,613	11,634
Total of tenants paying in cash...	13,385	57,477	14,603	51,047	22,954	57,967	50,942	1,66,491
Total of tenants paying in kind...	165	1,061	1,910	8,993	1,013	3,447	3,088	13,501
Total of tenants of both classes...	13,550	58,538	16,513	60,040	23,967	61,414	54,030	1,79,992
Percentage of total cultivated area held by tenants ...	...	37·1	...	34·7	...	32·6	...	34·67
Modes of payment of rent found to exist. In Cash. At revenue rate only ...	5,959	21,779	9,570	30,114	18,361	39,504	33,890	91,397
At revenue rates plus *málikaná*	4,749	23,403	125	974	64	300	4,938	24,677
At a consolidated revenue (*chakuta*).	2,677	12,295	4,908	19,959	4,529	18,163	12,114	5,417
			*733	*3,234			*733	*3,234
Rate per cent of málikáná on revenue. Highest	...	Rs. 700	...	R1,525	...	...	...	1,525
Rate per cent of málikáná on revenue. Lowest	...	2/8	...	3/	...	...	...	2/8
In Kind. Share of grain taken by proprietors after deduction of kamins' fees. 1/2	82	689	26	101	6	15	114	805
2/5	2	120	369	1,439	282	1,171	673	2,730
1/3	60	242	1,439	7,176	719	2,185	2,218	9,603
1/4	1	10	37	131	6	76	44	217
1/5	...	...	39	146	...	...	39	146

* These figures indicate tenants paying rent per *bigha*.

Occupancy right.

The question of right of occupancy for the tenant is an important one in this district, and it is rendered somewhat more difficult by the historical fact of the transfer of this part of the country to the Punjab in 1857. Mr. Maconachie, the Settlement Officer, writes:—

"It may be well to record my experience gained in the Settlement, that the people themselves never had here any clear and definite idea of a right of occupancy on the part of any tenant. I wish, and most earnestly urge, that it should not be presumed, because the district was subject to the Revenue Board at Allahabad, that the 12 years' rule as it is commonly called should hold good. The question should, in the absence of specific law, be treated as one of local custom, and each case decided on its merits with reference to this. It is easy to show that the hard and fast application of the 12 years' rule would land us in difficulties. There is no reason why on this principle right of occupancy should be given to those, or acknowledged in those only who have held the land in question for 12 years previous to the mutiny. If the 12 years' rule was binding in the Delhi territory before the mutiny, I can see no reason why it should not be held as binding between 1857 and 1868, *i.e.*, between the date of the mutiny and consequent transfer of Delhi to the Punjab, and the passing of the Punjab Tenancy Act. It would, therefore, include all those in possession for 12 years previous to 1868, which is pretty much the same as saying that all persons who have cultivated since the mutiny are occupancy tenants. I do not hesitate to say that this conclusion, if practically adopted, would un strongly against the local ideas of tenant right, even those of the enants themselves; as very few would be unscrupulous enough to assert

Chapter III, E.

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Village Communities and Tenures.

Occupancy rights.

or prejudiced enough even to think, such a title sufficient to give the right of occupancy. Such a conclusion would also in a very material degree stultify the laborious enquiry recently made into the *status* of tenants in the Government villages in Ballabgarh, as the gift of occupancy right was there limited (and as I think with sufficient indulgence) to those who had been cultivating 12 years before the mutiny. This rule which has of itself determined the large majority of these cases on Government estates, was adopted after careful discussion, and was intended to be something more liberal than actual law required."

Occupancy Tenants' holdings.

The size of the holdings of this class of tenants is smaller in Sunipat than in Delhi, and in Delhi than Ballabgarh, and though the average difference is not much, the aggregate is very considerable; so that Ballabgarh, which has a cultivated area of only 158,151 acres, as against 188,134 in Sunipat, shows 28,494 acres as held with right of occupancy as against 9,315 only in the northern *tahsíl.* Delhi with a cultivated area of 172,810 has 17,685 acres. The reason of this larger proportion in Ballabgarh is found in the liberal treatment by Government of tenants in the villages confiscated from the Rájá of Ballabgarh, and this perhaps may also account for the larger average of area. The number of occupancy tenants who pay in kind is very small; indeed, except in Delhi, they hardly exist at all; and in many parts it is an argument put forward in litigation against a tenant's claim to the right of occupancy that he pays in kind, and this is said without any reference to the Tenancy Act. The immense majority of the class pay at revenue rates of the village, except when the rent has been raised by judicial decree, and this is not often the case.

Tenants-at-will.

Tenants-at-will also very often pay at revenue rates, in fact, from a reference to the figures of the foregoing statement, it will be evident that there must be at least 20,000 holdings paying nothing more than this. In other words, with regard to some 7 per cent. of the whole cultivated area of the district, the social economy so arranges itself that a proprietor gets no return from his land; and does not find it to his advantage to evict a tenant who pays only the Government revenue. This is suggestive as to the stage of competition reached by the community, and the degree in which rigid political economy can be considered applicable to it. There is no great difference in the size of holdings of tenants-at-will as compared with those of occupancy tenants, though in each *tahsíl* they are slightly smaller.

Rent rates.

The commonest form of rent* paid by tenants-at-will, when it is something more than mere revenue, is a lump sum for the holding, called *chakotá.* This, though generally lower than what might be thought a full rent, often reaches a considerable figure, especially in valuable lands near towns, and in a lesser degree in the largest villages. In such places social attrition is greater, and the bonds of custom are in this respect looser than in the more secluded parts. Other modes found less commonly are, by revenue rates plus *málikáná* (or landlord's fees) at so much per cent. on the revenue, or by a

* *Zabtí* rates are not common; though they are taken sometimes for sugarcane, and other high crops. But they are not important, and the rates given in the table are of doubtful accuracy.

lump sum per *bighá (bigherí)*, which then without reference to percentages includes the revenue. Thus in not a few villages a rupee the *kachá bighá* is taken on all land cultivated by the tenant, a pretty good sum on a large extent of land. Nothing is more interesting in the agricultural system of the district than to watch the slow, unconscious, and so to say half-blind way in which the relations of landlord and tenant are adjusting themselves in accordance with the progress and development of the country, the comparative increase of intelligence among even the *zamíndárs*, and the general rise in prices which is so important a feature of agricultural history of the past twenty years.

Chapter III, E.

Village Communities and Tenures.

Rent rates.

Rent in kind.

Rent in kind is far oftenest ⅓ of the produce, and this after the *kamíns* or village menials have taken away their dues. Next to ⅓, ⅖ (*panjdú*) is the most common proportion. A kind of natural equity gives the lower rate of ⅓ on land newly broken up, or even less than this. One-half is very rarely taken. Near Sunipat may be noticed a very interesting compromise between the equity of sharing the produce, and the convenience of taking in cash. This is called locally *ijárá*, and may be defined as a prevaluation in grain. Thus every field held by the tenant is estimated according to its known capacity, and on it a quantity of grain is fixed as rent. It differs radically from *batái* in that it is known and fixed, and thus gives no occasion for the bickering disputes that so often rise at the division of the crop. It also differs of course from *zabtí* in not being cash. The grain rent is generally, but not necessarily, the crops grown in the current season.

Village officers.

Tahsíl.	Zaildárs.	Chief headmen	Village headmen
Delhi ..	15	107	753
Sunipat ...	15	144	815
Sallabgarh ..	14	98	709

The figures in the margin show the number of village officers in the several *tahsíls* of the district. The head-quarters of the zails, together with the leading tribes in each, are shown on the next page.

Zaildárs.

The *zaildári* system was first introduced at the recent Settlement. It was strongly opposed by the local officers on the ground that no natural leaders existed among the people, and that to select and put into authority over the rest any one from among equals would breed ill-feeling and bad blood. But the Government overruled these objections, and directed that as far as practicable "representative men" should be "raised up by methods, consistent with the social phase of the population," and care should be "taken to connect the *zaildárs* with such popular institutions as may exist or may survive, such as tribes which have not lost their cohesion or *tappas* of the chracter to be found in Karnál."

With reference to the objections raised by his predecessor in the Settlement as to the unpopularity of the appointments, Mr. Maconachie writes:—

"It is satisfactory to be able to note that most if not all of this seems to have been occasioned by the fear that a new tax was to be imposed for the remuneration of the *zaildárs*. There remains perhaps an uneasy feeling that a new *hákim* has been appointed, which in the popular mind involves the danger of new trouble; but on the whole it may be said that

Chapter III, E.

Village Communities and Tenures.

Village officers.

Tahsíl.	Name of Zail.	Number of villages.	Jama.	Prevailing caste or tribe.
Sunipat Tahsil.	Chilkhana with Kherí-gujar.	14	18,385	Gújars.
	Ganaur ...	16	24,205	Tagas and Mahájans.
	Pánchi Játán ...	17	24,965	Játs.
	Murthal	16	21,900	Játs especially of the Antal got.
	Sunipat	21	21,850	Sayyads, Patháns and Játs.
	Rathdhanah ...	15	21,300	Tak Seroa Játs.
	Kheorah	16	21,150	Antal Játs.
	Jakhaulí	16	20,955	Chohâns
	Kundlí	14	17,785	Játs and Bráhmins.
	Sardhanah	12	19,880	Játs.
	Purkhás	12	25,950	Játs.
	Júán	19	27,040	Játs.
	Bhatgáon	17	25,210	Játs.
	Rohat with thána Kalan	18	23,540	Játs.
	Hilálpur with Mandaura.	16	22,520	Játs.
Delhi Tahsil.	Narela	19	20,885	Játs.
	Kadipur with Alipur ...	37	24,781	Játs.
	Delhi	30	10,470	Játs. Gújars and Tagas.
	Babarpur, Sayidpur with Indarpat.	26	17,675	Chauháns.
	Tihar with Palam ...	22	18,020	Játs.
	Nilauthi	18	16,400	Játs.
	Mitraon with Najafgarh	16	23,685	Játs.
	Dhul Siras with Bijwásan.	17	21,740	Játs.
	Isakpur with Dindhasa	17	18,030	Játs.
	Suraida	16	16,225	Ahírs.
	Mahpalpur... ...	22	13,430	Játs.
	Azadpur with Badli ...	16	15,875	Játs and Ahírs.
	Bhawánah with Daryapur Kalán.	9	15,650	Játs
	Sultánpur Dabás with Karálá.	12	17,260	Játs.
	Kanjháolá	11	16,115	Játs.
Ballabgarh Tahsil.	Mohiná	11	22,480	Játs.
	Mortáhukah ...	21	15,685	Shaikhs.
	Tigáon	28	17,565	Gújars.
	Kheri Kalán ...	26	17,190	Játs, Rájpúts, Shaikhs and Gújars.
	Faridábád	27	22,490	Bráhmins and Shaikhs.
	Sihi	10	14,510	Játs and Gújars.
	Digh	11	14,140	Gaurahs.
	Kabulpur Bángar ...	14	18,390	Rájpúts and Játs.
	Ballabgarh... ...	9	16,550	Játs.
	Fattehpur Tagah ...	17	14,950	Mewátis.
	Pali Pakal	22	15,015	Gújars.
	Mahrauli	19	12,935	Gújars.
	Chiragh Delhi ..	41	14,120	Játs and Bráhmins.
	Kilokhri	27	11,210	Gújars.

Zaildárs.

there is now no strong local feeling against the system on the part of the mass, while among the more intelligent *zamíndárs* the object and scope of the appointments are understood, and to a very fair extent appreciated. A good deal of excited feeling doubtless has been raised, and possibly old quarrels or the remembrances of them have revived so far as the interchange goes of an angry recapitulation of the demerits and misfortunes of opponents in the candidature. But this seems ephemeral and in reality harmless; the natural inclination of the people to acquiesce in any established order of

Zaildárs.

things will almost certainly assert itself, and matters will become as they were, with a considerable gain to Government of a body of men, the most influential and the most intelligent of the agricultural class, attached in a convenient and elastic way to Government service, and bound to render certain important revenue and social duties in consideration of what is to Government a very trifling payment, but to them a valuable honorarium."

With regard to the homogeneity of the zails, of which a list is given above at page 88, the Delhi District, though there are perhaps no very strongly marked *tappas*, has certainly several sets of villages which "hang together," and have to a certain degree a feeling of kinsmanship. Among these may be mentioned the Játs, who have several well defined centres of local cohesion. There is the large *got* or clan of the "Antals" in Sunipat Khádar, and in the Bángar there are two great divisions, Dahiyas and Ahúlánás. The Tak Seroas again come in round about Ráthdhaneh. In Delhi *tahsíl* the ties are not so apparent, but local enquiry shows minor differences which are worth considering. In Ballabgarh there is a Gújar division both near Mahraulí and Tigaon, all Hindús. In Sunipat there are Muhammadan Gûjars also. Down in the south-west corner are a colony of Meos who have pushed up from Mewát, Alongside of these larger divisions are smaller sets of villages, many consisting of only four or five, some of two or three; and if a candidate secures the suffrages of such a small community, he sometimes lays claim to be considered a popular leader. The number of zails in the district is 44 in all. The total amount of the *inams* which have been fixed as a deduction of one per cent. from the revenue, is Rs. 8,473, which gives an average of nearly Rs. 193 for each *zaildár* This is deducted from the announced *jama*.

Chief headmen.

Alá lambardárs or chief headmen, were first appointed at different times during 1878 and 1879. The same controversy was raised on this question as on the *zaildár* appointments, and settled in the same way. Government held that the advantages outweighed the objections, which appeared likely to be only in a small degree real. As a partial compromise, however, it was directed that *alá lambardárs* should be appointed only in villages where there were three or more headmen. The one per cent. allowed for their remuneration was, as with the *zaildár ináms*, to be a deduction from the *jama* announced. Appointments were made in 349 villages, and the average emolument for each is Rs. 16-7. Other particulars may be gathered from the statement at the top of next page. They represent the body of headmen, and receive Government orders in the first instance, though as regards the collection of the revenue they possess no special authority or responsibility. In addition to their one per cent. as chief headmen, they have as headmen of their own villages, five per cent. of the revenue for which they are responsible.

Village headmen.

The number of headmen has been stated at page 87. Two points are worthy of note—first that at the recent Settlement women were sometimes found in possession of the office; and, secondly, that in several cases *lambardárs* have been appointed out of the cultivating and not the proprietary body.

Chapter III, E.

Village Communities and Tenures.

Chief headmen.

Statement of Alá-Lambardárs, Delhi District.

Tahsil.	No. of villages in the tahsíl.	No of villages in which Alá-Lambardárs have been appointed.	Jama of villages in which Ala-Lambardárs have been appointed.	Fees due to Ala-Lambardárs at one per cent.	No. of villages with more than 2 Lambardars in each.				
					Villages with three Lambardárs in each.	Villages with four Lambardárs in each	Villages with five Lambardárs in each.	Villages with six Lambardárs in each.	Villages with more than 6 Lambarbárs in each.
			R.	R.					
Delhi	288	107	1,70,126	1,708	38	32	15	11	13
Sunípat	239	144	2,66,312	2,674	44	44	22	15	19
Ballabgarh ...	283	96	1,34,943	1,355	37	38	10	7	10
Total ...	810	349	5,71,381	5,737	119	114	47	33	42

Village headmen.

This last seems to have occurred in two ways: Firstly, in certain cases at the Regular Settlement of 1842 villages were farmed to cultivators in the village, the proprietary body not taking up the villages at the rates then offered: when the next Settlement took place in 1872-80 these farmers reverted to cultivators, but were still allowed to hold their office. Secondly, in the case of villages that had become in one way or another property of Government, there being no proprietors, Government fixed on certain cultivators, and put them on the same footing as *lambardárs* in villages owned by the *zamíndárs.* The *pachotra* or headman's dues, which is a cess of five per cent. in addition to the revenue, varies greatly in different villages, the largest in this district being Rs. 175 in Harsana Kalan, the smallest P. 10 in Arázi Sabapur. The average remuneration for a village headman is Rs. 18-10-11.

Village watchmen.

Chaukidárs are employed in the usual way throughout the district. Their total number is 908, giving an average of 1·12 men per village. The largest number is found in Narela and Mahraulí, which enjoy the privilege of having 11 *chaukidárs* each. The distribution among the *tahsíls* is 301, Ballabgarh; 294 Delhi; 31 Sunipat. There are 44 villages which are not big enough to support a *chaukidár* alone by themselves, so their men do work for other villages also. Other facts are given below:—

1.	Number of villages with one *chaukidar* each	... 499
2.	Ditto ditto two ditto	... 55
3.	Ditto ditto three ditto	... 30
4.	Ditto ditto four or upwards	... 25
5.	Villages in which, owing to the small population, no arrangements exist ...	... 30
6.	Villages provided for by Municipal Committees	... 4
7.	Villages without *ábádis* ...	... 123
	Total	... 766

which, with the 44 above noted, make up the 810 of the district. The most prevalent castes among the *chaukidárs* are Shaikhs 133:

Village watchmen.

Fakírs 97: Bráhmins 96: Chúras 84: Patháns 78: Gújars 71: the number of Shaikhs, Fakírs, Churás and Patháns are thus greatly disproportionate to the Census numbers of these tribes among the general population of the district. The average pay per annum is in Ballabgarh Rs. 26-10-6, in Delhi Rs. 34-7-6 and in Sunipat Rs. 34-4-2. In some places they obtain also gifts at weddings, but this kind of perquisite is dropping out of fashion as not consistent with the social *status* engendered and fostered by the spirit of the times. In Delhi and Sunipat the *bách* is always levied by a uniform rate on families throughout the village, excepting the widow, the needy, and the *chúrá*. In Ballabgarh there is more variety: 195 villages follow the uniform rate; in four the proprietors pay more than the non-proprietors; in four it is the other way; in two it follows the revenue *bách*; in two more it is levied on the cultivated area; in four it is levied according to the means of the payer; while in six the *banyás* have to pay more than *zamíndárs,* and in one village five *sers* grain are taken per house. Three are provided for by Municipal Committees; eleven are too small to deserve the dignity of *chaukidàrs*; and fifty-three have no *ábádís.*

Agricultural partnerships.

A system of agricultural partnership exists in the district under which several land-owners club together, cultivate their joint land with their joint resources in the way of cattle and men, and divide the produce and pay the revenue in proportion to the labour, animal or human, contributed by each, without reference to the areas owned respectively. The same principle is extended in part to landless labourers, who join in the cultivation on condition of receiving a share of the produce (excluding fodder) and paying the same share of the revenue. These men do much of the hardest work. The partners in both cases are called *sájís* or sharers, the one without land being distinguished as a *ji ka sáji* or sharer of his body. His ordinary share is from a fourth to fifth of the produce of one plough.

Kameras.

When a labourer takes fixed payment, he is called a *kamera.* He may be either an agricultural labourer pure and simple, paid by the day, month, or year, (see page 92 below) or he may receive a small share of the produce in addition to fixed wages. At Ganaur, a large village of Tagahs, the *kameras* receive one-fourth of the produce or one-third, according as the proprietor or his family assists or not in the cultivation. The proprietor supplies the seed, bullocks, and gives the *kamera* one *róti* daily, a pair of shoes and a few clothes, besides a share of the produce. The *kamera* pays one-quarter or one-third of the revenue. When wages are paid in cash the usual amount is Rs. 24 with one *roti* daily, shoes and clothes.

Village menials.

The village menials or *kamíns* are the following :—

Chamárs.	Náis.
Chúhras.	Dhobis.
Khátis.	Sakkas.
Lohárs.	Jhínwars or
Kumhárs.	Kahárs.

Chamárs make shoes, weave cloth, and work as agricultural labourers. Those who work in the fields receive one-twentieth share of the produce, and one or two *rótís* daily on the days they work. They

Chapter III, E.

Village Communities and Tenures.

Village menials.

have also a right to the skin and carcases of animals dying in the village. They give one-eighth share of the carcass to the Chúhras.

Chúhras collect manure, and sweep the houses of the villages. Each has from ten to twenty houses under his charge. They receive one *roti* daily from each house, and a few *seers* of grain at harvest time.

Khátis make ploughs and all farm implements required by the villagers. They receive 20 *seers* grain at each harvest per plough.

Lohárs make the iron work of ploughs, and also iron tools, such as *khurpás, gandásahs*, &c. Like the Khátis they receive half a maund of grain per plough each harvest.

Kumhárs make earthen jars, vessels, &c., for which they receive payment in grain. Their remuneration is not fixed.

Náis do barber's work and also act as agents at betrothals and marriages. For barber's work they receive one *roti*. They have no fixed remuneration, but they receive from Rs. 4 to Rs. 20 at marriages. The father of the bridegroom gives his *nái* Rs. 4, and from Rs. 8 to Rs. 20 to the Nái of the bride's father.

Dhobis do the village washing. They receive five *seers* of grain each harvest, also one *roti* when they wash clothes.

Sakkas, Jhínwars or *Kahárs* are water-carriers. They receive five *seers* of grain each harvest.

Agricultural labourers.

The subject of the employment of field labour other than that of the proprietors or tenants themselves, and the system of agricultural partnerships, are thus noticed in answers furnished by the District Officer, and inserted in the Famine Report of 1879 (page 711 *ff.*):—

"It is customary for the agriculturists to employ field labourers for (1) ploughing; (2) weeding; (3) guarding the ripening crops; (4) cutting them when ripe. They are generally paid in money, to a man two annas, a woman 1½ anna, a child of 12 to 15, one anna, excepting harvest time, when they are paid in grain of about the same value. Sometimes a man gets Rs. 2 a month, and his food for ploughing or guarding the crops. The persons usually so employed are of the Chamár, Koli, Agri, Dhának, Lode, and Sweeper castes, who have most of them no other means of sustenance than field labour. Some of them make shoes, mend harness, weave cloth, and otherwise supply the wants of the village population, but they are almost wholly dependent on what they receive from the cultivators as wages for field labour. Very few inhabitants of the city of Delhi work in the field. The number of persons so employed may be put at about three per cent. on the total population, or five per cent. on the population outside the town of Delhi. Such field labourers are not so indebted as the poorer cultivating proprietors, for they cannot easily borrow money, and for the same reason their subsistence between harvests in average years is more precarious. They do not generally get advances from the village traders, nor do they live long on grain or money previously earned, though that does keep them going for some time after the harvest; they work at the preparations for the next harvest, or get an advance from the cultivator who regularly employs them."

The wages of labour prevailing at different periods are shown in Table No. XXVII, though the figures refer to the labour market of towns rather than to that of villages.

etty village grantees.

The last two lines of Table No. XVI show the number of persons holding service grants from the village, and the area so held.

Chapter III, E.

Village Communities and Tenures.

Petty village grantees.

But the figures refer only to land held free of revenue, which is by no means the only form which these grants assume. Sometimes the land is leased to the grantee at a favourable rent, or on condition of payment of revenue only; sometimes the owner cultivates and pays the revenue, making over the produce to the grantee; while occasionally the grant consists of the rights of property in the land, which, subject to the usual incidents, such as responsibility for revenue and the like, vest in the person performing certain specified services at such time and for so long as he performs them. These grants are most commonly made to village menials and watchmen on condition of, or in payment for, services rendered, to attendants at temples, mosques, shrines, or village rest-houses so long as they perform the duties of the post, and for maintenance of monasteries, holy men, teachers at religious schools, and the like.

These grants are known by the names *dohli* and *bhondah*, which are sometimes confounded, but should not be so, as they are really different in a material point. The *dohli* is a grant of land for cultivation made in return for religious services, such as attendance at a shrine, or giving water at a well, provided it be done by a Bráhmin, *fakír*, or other holy person. A *bhondah*, on the other hand, is a grant of inferior degree, to persons of inferior degree, in return for ordinary menial services, and has no connection with religion: the *bhondadár* is generally a *chamár*, carpenter, *bheestie* or the like. If he does not do what is expected of him he is deprived of the *bhondáh* land. A *dohlídár*, on the other hand, is not under this control. If he himself goes away, giving up the land, then it may be given to some one else, but not otherwise; although the idea of surrendering altogether the proprietary title is never entertained. This kind of village grant is a kind of *muafi* held from *zamíndárs*. The *dohlí* is generally smaller than the *bhondáh*, though neither is found over ten *bighas* in extent; the total extent of land held in *dohlí** and *bhondáh* is given below:—

Tahsil.	Dohli.			Bhondah.		
	No. of villages	Holdings.	Bighas.	No. of villages.	Holdings.	Bighas.
Delhi	175	1,005	1,017	1	1	3
Ballabgarh ...	70	186	397	110	279	976
Sunipat	150	1,199	1,614	28	58	107
District	395	2,390	3,028	139	338	1,086

Wood preserves.

Another characteristic incident of land tenure in the district is the reservation of wood-producing land in the *shámilát deh* as an enclosure whence no fuel or wood is to be cut. This is generally connected with religion in the shape of a *fakír's* hut, or grave or a religious shrine; but sometimes no such religious element is observable, and in such cases the practice is probably due to the love of shady trees which not unnaturally is possessed strongly by the

* The derivation of the name *dohlí* is said with some plausibility to be *dohalí*—two turns or furrows of the plough made over thus to religious use. *Bhondah* is written in books sometimes *bhondá* with a long 'a' at the end, but the silent 'h' is the more correct.

Chapter III, E.
Village Communities and Tenures.
Wood preserves.

zamíndár. In these *rakhyás*, as they are called (perhaps from *rakhná* to hold, or keep), the prohibition against cutting or using the wood is no mere form of words. As a rule indeed the people, with that faculty of docile obedience which is at once such a help and a trouble (when it degenerates, as so often is the case, into slavish adherence to custom) to the administrator, observe the social precept without asking more about it. But if a man transgresses by cutting the wood, he is fined at different sums, generally twice the value of the wood. If he does not pay, he is put out of caste, but, as a fact, the villagers say a fine is always paid without excuse. Money thus obtained is spent in charity. There are forty-six villages at least which thus preserve trees never to be cut. The common preservation of land for timber-growing (the timber being cut at regular intervals) may be noticed here, though it is more an incident of the management than of the tenure of land. In ninety villages this is done: the trees are generally *kíkar* or *van* or *dhák*. and are cut at intervals of about five years. In some places the income thus derived is very considerable.

Rights in the village site.

The *ábádí*, or village site is generally held in common, but the ground of each proprietor's house practically belongs to him. As regards the important point of the rights of non-proprietors, which marks almost more than anything else the degree of development of the village into a town, the practice is diverse. In 20 villages it is said (perhaps doubtfully) that non-proprietors can sell their houses with the land on which they are built; in 589 villages they may sell the materials (*malba*) but not the site; and in 56 they can dispose of neither. In 13 cases it was found at attestation of the Administration Paper that the matter was in dispute: in eight villages no non-proprietors had houses. In one village, Bhaskaula in Ballabgarh, there is the curious compromise that those persons who, though not proprietors in the village itself, are proprietors in villages adjoining *viz.*, Muazzimábád and Mohabatpur, may take away the *malba* but other non-proprietors may not. The remaining 123 villages have no *ábádí*.* The 20 villages where non-proprietors are said to be entitled to sell the site of houses as well as the materials are thus distributed: Sunipat 14; Delhi 3; Ballabgarh 3. Some of the places are no doubt towns where one would expect to find the rule thus, *e.g.* Sunipat, Mahraulí, Farídábád and perhaps Bowána; but for little places like Kurainí, Sitaoli, Nawádah zer Najafgarh, and others, it is not easy to find an explanation.

Poverty or wealth of the proprietors.

Table No. XXXII gives statistics of sales and mortgages of land; Tables Nos. XXXIII and XXXIIIA show the operations of the Registration Department; and Table No. XXXIX the extent of civil litigation. But the statistics of transfers of land are exceedingly imperfect; the prices quoted are very generally fictitious; and any figures which we possess afford but little real indication of the economical position of the landholders of the district. The subject is discussed at some length at pages 332 *ff* of the Famine Report of

* In Delhi 50, Ballabgarh 53; Sunipat 20; and of these so far as is known never inhabited. Delhi 17, Ballabgarh 16, and Sunipat 3. About 16 it is not known if they have ever had *ábádís*.

Chapter III, E.

Village Communities and Tenures.

Poverty or wealth of the proprietors.

1879, where actual figures are given for instances selected as typical. In forwarding these figures, the Settlement Officer wrote as follows :—

"I pass on to the last matter on which report is required. The causes of indebtedness are not generally obscure; in order of importance they may generally be put as follows :—

(1.) Expenses of marriages and funerals.
(2.) Vicissitudes of season, as regards crops.
(3.) Ill-luck with cattle, or personal illness.
(4.) Severity of Government revenue.

All these matters have often been dwelt on, and I am not likely to strike out any thing new. The question of sumptuary laws will probably be considered; perhaps too the idea of a rough assurance association to afford compensation in cases of death of cattle is not original. Both matters seem to me worthy of consideration But I think it better to pass on to the last point, indebtedness caused by the severity of Government revenue. I think this uncommon, but I believe it exists, and more than anywhere else in the canal villages. Some of these have been paying Rs. 3 on every cultivated acre for the last 30 years. Now this may be borne in fair years, though it is a great burden, and forces on a system of cultivation which cannot but injure the land. But in bad years, or when water is scarce, or not given at the right time, the canal village is worse off than any. The canal irrigation, at the style in which it has been going on here for many years past, would, I believe, ruin any land in time. It is of no use to say that the people are to blame for flooding their land so; their reply is cogent; we must do so to sustain the heavy Government demand; inelasticity too of the canal water rent is against them, so that as a matter of fact, canal irrigation, which should be the most certain protection of a high average, and of that average from wide variations, often introduces an element of speculation into the matter, which would at first sight seem astonishing. The inference to be drawn seems to be that Government has not properly discharged its duties as joint trustee of the land with the *zamíndárs.** If they have not discretion sufficient to prevent a far distant but surely coming destruction of the powers of the soil by a moderate use of the immense power of irrigation from canals, that duty and that responsibility nevertheless remain with Government. The remedy is simple; allow only moderate irrigation, and assess accordingly; severity of revenue in other than canal villages is rare. The Government demand is inelastic, and we have failed to teach the people, as yet, to prevent the strain in bad years by forethought and thrift in good seasons. But the adjustment is generally accomplished, though in a clumsy and costly manner. The money-lender gives help in bad seasons, and is repaid in good; the greater cost is found in his exorbitant interest. If we push this further, we find that the "middleman" class is numerous; that it is favoured by superior intelligence and social custom. And this brings us to what perhaps is not the greatest cause of indebtedness, strictly speaking, but the greatest cause of *increase* of indebtedness, *viz.*, the power of the *bania* and money-lender over the *zamíndár*. The subject is a well worn one, and it seems unnecessary to do more than, having noted the distinction above, to record my assent to the general opinion. Twenty years ago the canal villages were in the height of prosperity, *pakka* houses were built, the common funds of the proprietors often raised a substantial traveller's house used as a village assembly room (the *chaupár* or *chaupál*). The oxen, fed on sugar cane stalks, *gur*, and the abundant fod-

* The new revenue assessment has been framed with a view to improve matters in this respect.

Chapter III, E.

Village Communities and Tenures.

Poverty or wealth of the proprietors.

der of canal-irrigated fields, increased in size and strength; the people themselves adopted a more luxurious style of living and dress. But this prosperity has waned; the crops are not what they were; the soil is enfeebled and in many places destroyed, at least for the time. The people, however, do not easily come back to their primitive simplicity, and the consequence is that there is in the canal-irrigated district a far greater amount of indebtedness than there would have been, had the old circumstances of expenditure been unaltered. Still, where the canal has been used, and not abused, there is yet even a prosperity not equalled anywhere in the district. The holding of the canal proprietor is not generally larger than the ordinary size throughout the district, 12 to 13 acres; but he gets richer crops, especially sugarcane, off the ground. In a large canal village, it is not uncommon to find a mass of cultivation of this crop, sometimes 50, 75 or 100 acres standing together, with regularly-marked narrow-lanes, well fenced in, leading from one end to the other. Sugarcane is expensive alike for seed, planting, care while growing, and expressing when ripe. But it well repays the cost, and is in fact the great stand-by in those villages where it is grown. Sugarcane is grown chiefly in the Khádir *chak*, and in some villages in the Bángar, but nowhere does it come to such a size as in the canal villages.

"The other *chaks* have proprietors for the most part in moderate circumstances. The Kohi *chak* probably is the poorest, and there the people are sometimes very low in their standard of living. The houses are mere *chappars* of thatch; sometimes mud walls support the thatch; the food consists mainly of the inferior grains, and the dress often is only a piece of dirty coarse cotton cloth in the form of a *chádar*. The general average however is better than this. No. 1, it is true is in debt, but his style of living is something like comfort, and it is because he has a large family for his moderate holding that he becomes embarrassed. Had he fewer mouths to feed, he might be as well off as the shrewd Jat No. 4, who, in a holding of only seven acres, has managed to save money, and knows how to use it when saved. No. 9, though under a temporary cloud, may perhaps get right again; in an ordinary year he probably pays his way. His house is not much certainly; but it is better than the Kohi Gújar. If it were not for the cows of the latter, he would hardly manage to live.

"The general condition then of the proprietor may be described as moderately prosperous; there is little margin for him to fall back on in bad times, and his style of living is somewhat low; but in ordinary years, and with ordinary expenses. he generally pays his way. A marriage, a funeral, or bad luck with his cattle, may bring him into difficulties, but these too he may extricate himself from in many cases. There is reason to believe that legal fees are in a few instances the cause of embarrassment, if not of ruin. The tenants with occupancy rights, and still more the tenants-at-will, might perhaps be supposed as being inferior in station, to be inferior in circumstances also. This, however, is not always the case. The tenant with occupancy has sometimes (as in case No. 2) an auxiliary income from *parohitai*, priestly dues, which enables him not only to pay his way but save money. In the case in question this auxiliary income becomes most important. The number of such privileged persons is necessarily limited, but without such adventitious aid the tenant is often a man of substance. Whether he will remain so is a matter of doubt. Up to the present time he generally pays only the revenue-rate of the village on his land, i.e., he pays no rent; so that, provided his holding is of a fair size, he may be as well off as the proprietor of other land in the same village. There seems little doubt, however, that when the new assessments shall be announced, a general attempt will be made on the part of the proprietors to obtain rent, or an enhancement of rent, and this must lessen the profits of the tenant. The position of the tenant-at-

Chapter III, E.

Village Communities and Tenures.

Poverty or wealth of the proprietors.

will is every unequal. He, too, at present often pays only the revenue-rate, but on the other hand he sometimes has to give a competition rent. The pressure of population is felt more directly here than in any other class. A family of strong men, or having active women, may do well ; but whenever the non-producing part of the house becomes large, distress is sure to follow. The Máli of Ráthdhanah (instance No. 3) gets together in one way or another a pretty large income, but the large quantity of food requisite to keep his seventeen people going makes it a hard matter to keep out of debt. Probably by the time the boys come to working age they will find their earnings embarrassed with considerable debt. The limit, however, is not far off ; when the money-lender ceases to give credit the house breaks up, and the men scatter to earn their living by hiring themselves out. The difference in *status* arising from advantages of irrigation is shown in instance No. 8, where a tenant-at-will on 17 acres contrives to pay a revenue of Rs. 62 odd, and Rs. 40 more water-rent. The revenue of course includes rent paid to the proprietor. With this heavy charge on him, he yet pays his way, and is on the whole in comfortable circumstances. This being so, it is no wonder that the proprietors expect to be well off, and are disappointed when they find their former prosperity gone."

CHAPTER IV.

PRODUCTION AND DISTRIBUTION.

SECTION A.—AGRICULTURE AND LIVE-STOCK.

Chapter IV, A.

Agriculture and Live-Stock.

General statistics of agriculture.

Table No. XIV gives general figures for cultivation and irrigation, and for Government waste land; while the rainfall is shown in Tables Nos. III and IIIA and B. Table No. XVII shows statistics of Government estates and Table No. XVIII of Forests. Table No. XX gives the areas under the principal staples, and Table No. XXI the average yield of each. Statistics of live-stock will be found in Table No. XXII. Further statistics are given under their various headings in the subsequent paragraphs of this Chapter. Land tenures, tenants, and rent, the system of agricultural partnerships and the employment of field labour have already been noticed in Chapter III. The following table gives the areas as ascertained at the recent Settlement. :—

Tahsil	Total Area.	Minhai.		Culturable.			Cultivated.			
		Unculturable.	Unassessed.	Waste.	Lately abandoned.	Gardens.	Well watered	Naturally moist	Unirrigated.	Total of cultivation.
Ballabgarh	2,48,828	65,357	3,900	19,375	663	407	13,912	5,590	1,39,624	1,59,126
Delhi ...	2,76,405	41,460	7,085	51,563	2,209	1,196	17,527	20,257	1,35,108	1,72,892
Sunipat ...	2,90,452	34,043	924	65,131	2,001	954	43,950	1,453	1,41,996	1,87,399
Total of the district ...	8,15,685	1,40,860	*11,909	1,36,069	4,873	2,557	75.389	27,300	4,16,728	5,19,417

* 8,932 cultivated—making total land actually cultivated 528,349.

The seasons. Rainfall.

The total annual fall of rain and the manner in which it is distributed throughout the year are shown in Tables III, IIIA, IIIB.

The *rabí* crop is called locally *sádhi*, the *kharíf*, *sáwaní*. Land bearing two crops is called *dofasli*, but this means two full crops, such as wheat after cotton, while for land which bears a lighter crop after a full one, such as *channá* after *jawár*, there is another name, *fánsil*. Land giving one crop a year is called *badhwár*.* Three crops in a year are very rare indeed in Delhi ; they can be managed only by putting in a fast-growing crop like *chíná*, and the land requires rest after it. Two crops even are impossible without manuring. The comparative importance of the harvests varies in different parts, as a general rule, the Khádar mainly depends on its *rabí* crop, while the Bángar rain-lands naturally yield their revenue in the autumn harvest. And this point will indeed tell

* The woid wss originally, *Bhadwár*—meaning the land depending on the Bhádon rains for its cultivation.

pretty well the proportion of the crop. The villagers have themselves within certain limits decided how much revenue shall be paid on each crop, and this shows pretty plainly the relative importance of each. In Bángar well-lands the proportion is about half-and-half, and the cannal lands are pretty much the same.

Soils of the district how classified.

The soil of the district is mainly alluvial, and is classified as *dákar*, *rauslí*, and *bhúr*, which are described respectively as a clayey loam, a half sandy half clayey loam, and a sandy loam degenerating in its inferior state to mere sand. The *zamíndár* distinguishes the three kinds according to their degrees of consistency: the *dákar* clods are hard and stiff, not easily broken; the *rauslí*, while looking firm as a clod, should crumble in fine pieces when let fall from the hand to the earth; while *bhúr*, as a rule, does not lie in clods at all. The productive qualities of the soils may be estimated from their description. *Dákar* is strong and fertile if it is well worked and its particles well separated, but it is generally too stiff for the comparatively light ploughs of the native agriculture, while its great retentiveness of moisture requires a favourable succession of wet and dry weather. *Rauslí* is more easily worked, and is more porous; with less natural strength and forcing power, it is on the whole as good as *dákar* because it mixes better with manure, and allows the chemical action of the air freer scope. A light *rauslí*, likes a brackish (*malmala*) water-well; the *zamíndárs* know this, though to a stranger they not unfrequently make the complaint, *páni bil-kul khárá*, (our water is altogether salt), as proving the want of productiveness in the soil. This is referred to further on with reference to irrigation.

Distribution of soils.

The kind most commonly met with is *rauslí*. In fact, *dákar* is hardly found except in drainage lines, or old beds of pools and ponds; while *bhúr*, representing sand scarcely at all mixed with vegetable decayed matter is also rare: the proportion as found in the district cultivated area is, *rauslí* 79 per cent., *dákar* 13 per cent., *bhúr* 8 per cent. There is a considerable difference in the various assessment circles in respect of the distribution of soils. *Dákar* soil is found extensively in low-lying lands where the passage of drainage water, either free or impeded, may be suspected. It is also formed in canal lands by the accumulated deposit of alluvial matter, which is brought down by the canal, and the layer of decayed vegetation which generally works into the ground year by year. *Rauslí* is the normal soil of the Bángar, and *bhúr* represents the result of drainage washing away the lighter particles of soil or rock, so that it is not unnaturally found most largely in the Khádar near the river, or in the tracts immediately lying under the hills: the average of the assessment *chaks* as regards the distribution are given at the top of next page.

Agricultural implements and appliances.

Table No. XXII shows the number of cattle, carts, and ploughs in each *tahsíl* of the district as returned in 1878-79. The implements used by the *zamíndár* are as follows:—The plough (*hal*), of which the wooden share is *panyárá*; the yoke for his oxen (*júá*); *sántá* is the whip he urges them with when lazy or refractory; otherwise he does a great deal with the animal's own tail, which he twists and twirls in a manner which by its results would seem most significant.

Chapter IV, A.

Agriculture and Live-Stock.

Distribution of soils.

Chak.	Soil.	Ballabgarh. Area.	Ballabgarh. Percentage.	Delhi. Area.	Delhi. Percentage.	Sunipat. Area.	Sunipat. Percentage.	Total. Area.	Total. Percentage.
*Khádar-Bángar.	Dákar ...	1,235	3	1,152	13	9,575	13	11,962	10
	Rauslí ..	32,025	82	6,354	69	56,705	80	95.084	79
	Bhúr ...	6,093	15	1,682	18	4,872	7	12,647	11
Bángar.	Dákar ...	1,240	2	13,288	18	29,120	25	43,648	17
	Rauslí ...	49,842	86	58,723	79	82,705	71	1,91,270	76
	Bhúr ..	6,788	12	2,514	3	5,157	4	14,459	7
Dahrí or Dábar.	Dákar ...	29.42	14	9,201	17	...	...	12 143	16
	Rauslí ...	11,970	58	41,408	78	...	...	53,378	73
	Bhúr ...	5,525	28	2,640	5	...	...	8,165	11
Zerkohí	Dákar ...	178	1	796	4	...	...	974	3
	Rauslí ...	10,212	56	17,038	95	...	...	27.250	75
	Bhúr ...	7,757	43	213	1	...	...	7,970	22
Khandrát	Dákar ...	...	...	14	...	...	...	14	...
	Rauslí ...	6,254	100	4,598	92	...	...	10,852	97
	Bhúr ...	...	...	364	8	...	...	364	3
Kohí.	Dákar ...	18	...	60	..	...	...	78	...
	Rauslí .	14,493	90	12,713	100	...	...	27,206	94
	Bhúr ...	1,579	10	52	...	...	...	1,631	6
Total of District.	Dákar ...	5,613	4	24.511	14	38,695	21	68,819	13
	Rauslí ...	1,24,796	79	1,40,834	81	1,39,410	74	4,05,040	79
	Bhúr ...	27,742	17	7,465	5	10,029	5	45,236	8
		1,58,151		1,72,810		1,88,134		5,19,095†	

Agricultural implements and appliances.

The reins he checks them with are *rás*. He has besides, his axe (*kuhárí*), and the spade-hoe (*kassi*), the common country hoe (*khurpá*), and the small hand scythe with jagged edges like a saw (*drátri*) with which he cuts most of his crops. The *gandásah* is a chopper for cutting up *jowár* stalks and sugarcane, and a smaller tool of the same kind is a *gandásí*. The *khodálá*, *khoduá*, or *rámprá* is a kind of spud with a thick handle used for making holes, where the line of action is the same as that of the hand, thrust downward. A smaller one is a *khodálí*; *kasólá* is a tool used for hoeing, smaller than a *kassí*, but working on the same principle.

Sowing.

Sowing for the *rabí* begins in Asauj, the latter part of September, and continues till Mangsir has half gone, the beginning of December; the order of sowing is gram, barley, wheat. *Channá* is always sown with a rough drill (*orhná*) fastened on to the plough. This is merely a thick piece of bamboo, the upper end of which has been split into many slips, and opened out so as to form a kind of trumpet shape. It is strengthened with an iron ring put inside (*andí*) and bound with leather outside; the top part of the *orhná* is called *dórhí*. It is big enough at the mouth to let a man's full hand

* In Sunipat this is wholly Khádar; in the other two *tahsíls* the villages mostly contain both Bángar and Khádar soil.

† The revised calculations of these measurements give a slight increase on this of 322 acres, *viz.*, 159,417.

Chapter IV, A.

Agriculture and Live-Stock.

Sowing.

in. The sower walks along with his *chádar* full of seed, and takes out a handful with his right hand, and gives it to his left hand to drop down the *orhná*, the left hand remaining on the *dórhí*, and guiding the plough.* Barley is sown with a drill or broadcast (Ballabgarh *pabhér*—Delhi *pabhér* and *bakhér*—in Sunipat *bakhér* and *hindáo*). Wheat is sown with a drill, and also broadcast, and in the northern part of the district in the furrow (*khud*) without the drill. Sowings for the *kharíf* (except for sugarcane, of which the special treatment is described further on), begin in Chait with cotton and *jowár* for fodder. Then come *bájrá*, the *jowár* intended to give a full crop, *makáí, urd, moth, múng, jowár*, &c., &c. *Makáí* and *moth* can be sown up to 15th Sáwan. Both modes of sowing are used; broadcast is however, preferred when the ground is well moistened as after good rains. When the land is dry the drill is more used.

Ploughing.

The ordinary number of ploughings is for the *kharif* crops five, and for the *rabí*, nine. The first ploughing is called *pár*, the second *dosar*, the third *tesar*, the fourth *chausar*, and the fifth *panchbáhini*; after this there is no special name till the ninth, when it is *naubáhini*; and this is enough. But sometimes for sugarcane more is done. The depth of ploughing is only six fingers breadth, and is often only three; this is of course merely scratching the ground. Seed is put in about three fingers breadth deep. Good ploughing is a *pakká bighá* per day; work goes on from early dawn to evening, with two hours rest in the middle of the day. But this of course is work in the Indian style, and allows for some half-dozen pulls at the *hukkáh*; four times before mid-day and twice afterwards. Some rest is necessary of course for the bullocks, and to make sure that their necks will not be galled by the yoke (*júá*). Well-work generally is very trying for the animals; the husbandman says it is as bad for them as gambling is for a man. The *sohágá* is used after ploughing, for levelling the ground, and breaking the clods (*dalle, dhím*). It is also called *mahz*. A little *sohágá*, according to the usual way of making diminutives, is *sohágí*, or *mahjí*.

Lucky days.

Propitious times (*mahúrat*) are sought for ploughing, and certain days must be somewhat humoured. Thus on Monday and Saturday a prudent man will not plough with his face to the east. On Monday and Saturday the demon of the four quarters (*Disá-Súl*) remains in the east; his location is not so fixed during the rest of the week as to give rise to any other proverb; but a *zamíndár* will not of his own accord go northward on Tuesday and Wednesday or westward on Friday and Sunday, and the south must be avoided on Thursday (*Brihaspat.*) These limitations are strictly observed.† Wednesday is good for sowing and Tuesday for cutting the crop.

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* Most of the guidance is done with the voice. *Barrh* turns the animal to the righ; to turn it to the left, it is necessary to say *ah* (the *h* very soft), and as the turn it always made from right to left, this is the cry at the end of each furrow. To stop them turning the man makes a noise with his lips (*puchkárí*).

† Of course a *hákim's* order, such as a summons to court, must be obeyed, whether on a lucky or unlucky day. But the *zamíndár* will explain his want of success in a suit by saying—"I went to the devil (*Disá-Súl*) so I was bound to be unlucky."

Chapter IV, A.

Agriculture and Live-Stock.

Harvesting.

Crops are harvested by the *zamíndárs* themselves, but they generally require the aid of hired labourers, so that in almost every village some of this class will be found. They are for the most part *Chamárs*, but sometimes *Chúhrás*. *Mális* generally cultivate on their own account, but at times work as labourers. Brahmins often go shares (*sájhí* or *sánjhí*) with the proprietor, furnishing one yoke of oxen to one of the owners. A Ját does this too when he is poor. The rates of pay for the *kharíf* season are 2 annas per diem and a *rotí* of ¼ seer weight, but the bread given in is sometimes enough for a full meal. The owner calls on the men he wants for next day the evening before, and looks them up too in the early morning. Then they all go a-field together and begin work. When six *gharís* of the day have passed the *básí* meal is brought by the owner's boy or girl for all the men. After this work goes on again till noon, when the main morning meal comes on. The labourers provide this for themselves unless it be a dear season for labour, when the proprietor will have to find it. The work is again resumed, after a pull at the *hukkáh*, and goes on in a quiet way till sundown or after that, and then they all go home together. No one forces the labourers to stay, for no one is extremely anxious to go; they even take an interest in getting the crop cut and gathered in quickly. The general understanding is that the cutting goes on till sundown, and the collection of the sheaves after that. Pay is given that evening or the day before. If payment is not made, the man is known and marked, and they laugh at him the next season.

In *rábí* the labourer mostly takes grain; he won't take cash. The rate is 4 seers, or more, reckoned by sheaves (*púlís*) which give something less than a seer each. In order to see that he is not cheated by very big sheaves being taken, the owner puts his own people to arrange the stock (*kúndrá*); the big sheaves are put down at the bottom, and so are safe. A man cuts about ¼ *pakká bighá* in the day. The hired labourer eats three times a day, and there is not much inferiority in his diet to that of the land proprietor. He has not the rank of the *zamíndár*, but otherwise is happy.

Hoeing and weeding.

Hoeing and weeding (*naláí*) are considered good for all crops, but some need this more than others. Sugarcane is never satisfied in this way; cotton likes also much to be clean; while wheat will do with one good hoeing: also *jowár*, and *bájrá*. Pepper wants a great deal, and tobacco the same.

Carting grain to the threshing floor.

The grain when cut is carted to the threshing-floor (*pair*; Punjabí, *kalwárá*); a collection of these is called a *khátá*. The owner will generally see to his crop himself by sleeping there at night till it is threshed out, which he loses no time in doing. "With your threshing-floor and your enemy, deal quickly."

Modes of storing grain.

Grain is either stored in *kothás* or rooms of the house, or in *kothís* in one of them, or in a large canvass bag *théká* which stands upright by the weight of the grain in it, and holds 50 or even 100 maunds. All kinds of grain are housed in this way. The animals attacking grain when thus stored (besides rats and mice of course if there are

ny) are (1) *sursali*, (2) *khaprá*, (3) *dhorá*. Of these the *dhorá* is a winged insect with a little round body; if the *khaprá* is put into a granary where he is, he dies, not being able to abide the savour of the other! The *khaprá* is a kind of weevil that confines his depredations to the top of the store, not going more than a span deep. The *sursali* is a kind of red ant; he is as bad as the *dhorá*.

Manure.

Manure is generally the dung of cows, buffaloes, or bullocks fastened up in the house. No *zamindár* hesitates to handle it; it would be most unreasonable, for dung and mud serve him instead of wall-papering. The ashes of cow-dung, pats, *upla*, and of any wood burnt—but not those of the *khoí* (canestraw refuse),—all come into use. The great enemy that prevents the supply of manure being much larger than it is, is the custom of burning such pats for fuel. All but the best families use their women in making them up. When made, they are placed inside a square enclosure called a *bitaura*. The pats are dried, put inside, and it is then built up solid, and then closed for future use. When the pats are needed, a hole is made in the side and they are taken out as wanted.

Fallows and rotation of crops.

There is no custom of fallows in the district. The soil indeed has very little rest now-a-days, whether from the greed of the *zamíndár* or from the acceleration which appears going on generally in the slow-paced oriental life. Land left unsown after one crop is reaped, during the succeeding season is called *tápar*; next year if it is still left so, it becomes *banjar*. *Báhan* is really the name for land after it is ploughed (*báhná*); when sown, it takes the name of its crop. Rotation of crops is partially practised, for the *zamíndár* has his predilections and prejudices which may be taken as embodying the results of traditional experience about the succession of crops. Thus after wheat will come *jowár*, or cotton, or *moth* with advantage; after sugarcane, cotton, or *jowar* or *urd*; after cotton *makkaí* is very good. The best rotation is given as follows: sugarcane, then cotton, then tobacco, then pepper, or *makkaí*.

Irrigation in Delhi.

Delhi stands high in the list of Punjab districts as regards the proportion of protected, *i.e.*, irrigable area. The statistics given for the purposes of the Famine Commission,* place the percentage of such area as compared with the total cultivated land at 37, of which 15 may be taken as protected by wells, 4 by *bands* and irrigation from *jhíls*, and 18 by canals. Some particular notice will now be taken of each of these.

Number of wells.

Some facts about wells in each *chak* are given at the top of the next page.

Kinds of wells.

There were in 1872-75, the years of Settlement measurements, in the whole district 8,841 working wells, *viz.*, 4,797 in Sunípat, 2,256 in Delhi, 1,788 in Ballabgarh. This information, however, is not so precise as it looks, for wells, so called, are of four kinds, of very unequal degrees of efficiency in irrigation. There is first the ordinary masonry well,† made of brick, or stone, and mortar, and

* See Volume I of Report, page 178.

† *Pakká kúa, golá, rékhtá.*

Chapter IV, A.

Agriculture and Live-Stock.

Number of wells.

Tahsil.	Assessment Circle.	Cultivated area in acres.	Wells.			Acres irrigated from wells		
			Masonry.	Without masonry.	Total.	Masonry.	Without masonry.	Total.
Ballabgarh.	Khádar Bángar	39,353	246	75	321	2,015	404	2,419
	Bángar ...	57.870	613	217	830	6,359	1,505	7.864
	Dahrí—Sailábá	20,437	159	7	166	658	11	669
	Zerkohí ...	18.147	160	3	163	874	3	877
	Khandrát ...	6.254	228	0	228	1.871	0	1,871
	Kohí ...	16,090	80	0	80	334	0	334
	Total ...	1,58,151	1,486	302	1,788	12,111	1,923	14,034
Dehli.	Khádar Bángar	9,188	103	156	259	881	1,653	2,534
	Bángar ...	74 525	512	182	694	3.927	2,380	6.307
	Dábar ...	53.249	745	32	777	5.259	205	5.464
	Zerkohí ...	18.047	207	1	208	1,775	13	1.788
	Kohí ...	12,825	70	0	70	722	0	722
	Khandrát ...	4 976	246	2	248	2,012	15	2,027
	Total ...	1,72,810	1,883	373	2,256	14,576	4,266	18,842
Sunipat.	Bángar ...	1,16,982	887	189	1.076	6.197	1,573	7,770
	Khádar ..	71,152	2,597	1,124	3,721	28,447	8.345	36,792
	Total ...	1,88,134	3,484	1,313	4,797	34,644	9,918	44,562
	Grand Total...	5,19,095*	6,853	1,988	8,841	61,331	16,107	77,438*

Kinds of wells.

constructed to last, and often actually lasting hundreds of years.† Next in point of solidity of construction is the dry masonry well. This is found chiefly in the circles near the hills where the vicinity of the rock renders the use of rough, half-hewn, stone very cheap; but there are not very many places where this kind of construction answers. Then there is the wooden well,‡ a well of which the sides are built of curved block pieces of wood, like the segments of a cart-wheel, in length varying from nine inches to two feet. These wells in favourable soil, and not too deep-sunk, last for many years, sometimes a full generation. They are found in many circles, but specially in certain villages of the Khádar. Lower than these in the scale of efficiency and durability is the Jár-ká-kúa, § a mere hole dug in the earth, with its sides fenced round with brushwood of various kinds,|| and thus forming a rude support to the crumbling soil. These wells are of course very cheap, and in most places last only one, two, or three

* These are the figures of the settlement assessment reports. The corrected area is 5,19,417, or 322 acres more The corrected well watered area is 75,389

† It depends very much on the sub-soil whether a well will last—the old wells, (which are made with a mortar, hardly ever alas equalled now-a-days)! often fail, and fall into large block pieces, because of some treacherous giving way of a sandy, which is always liable to become a hollow, sub-soil,

‡ *Gandwále ká cháh.*

§ Also called *Banwálá.*

|| The most common kinds of wood used for this purpose, are *jhárí*, *dhák*, and *bánsá*.

Chapter IV, A.

Agriculture and Live-Stock.

years, though in a firm, hard soil, they may last a little longer. The depth to which they are sunk is of course small, the deepest not exceeding twenty feet.

Jhalár; dhénklí.

Besides these wells is the *jhalár* and the *dhénklí*; the former is found on the side of river streams and *jhíls*, and is merely a variety of the Persian wheel with larger *tindás* (water pots); the latter is a simple but ingenious apparatus by which the water to be raised comes up in a vessel suspended from the long arm of a lever of the balance kind, and its weight is overcome by the weight of a block of hard earth or mud piled on the other end of the lever. The pole constituting the beam of the lever works up and down on a rude wooden fulcrum placed in a fork of the support, which is also of wood. When the water raised is to be emptied into the distributory channel, the weight of the short end holds the vessel at the level of the surface. The manual labour necessary is employed to sink the vessel in the well; a curiously inverted process, but which answers its purpose. The weight is so graduated as to only just exceed that of the water vessel when full.

Two modes of raising water, *charsá* and *harat.*

As to the means of raising the water there are two kinds of wells; the rope-and-bucket, or *charsá*, and the Persian wheel or *harat*. The first is the only kind used in the southern part of the district, and up northward to Ráthdhanah, *i.e.*, nearly as far as Sunipat. Then comes a small zone in which both *charsá* and *harat* are found, and then beyond this comes the part where only the *harat* is used. Both kinds of wells are so commonly known that it is unnecessary to describe them.* There is the question, however, of comparative efficiency as regards irrigation, on which a few notes may be made. It is not merely the depth of the spring level that practically decides the question for the agriculturist which he shall use. It is far more, if not entirely, a matter of custom and traditional habit. There are villages in the Khádar, where the water is so near that a Persian wheel would seem the simplest mode of raising water, where yet from long hereditary use the people employ only the *charsá*. And again in some villages north of Sunipat the water is not so very near as from this cause alone to make the *harat* specially eligible. A fact which is more likely to afford a partial explanation in some cases is the difference in the division of labour. In the *harat* the arduous labour falls alone on the oxen. In the *charsá*, while the animals have to work hard, there is also a good deal of active though intermittent labour for the men. The toil of the oxen in the *harat* is unremitting, while in the *charsá*, though the temporary strain is greater, there are intervals of rest while the animals are coming up from the hollow (*gon*), where they are released from the *láo*. The man driving the Persian wheel ordinarily sits on the beam behind the oxen as they go round. The influence of the active muscular strain in the *charsá* work is seen in the well developed sinewy frames of the Játs and Ahírs who work at this from morning till night. Mr. Maconachie writes:

"Personal observation obtained figures, which may be relied on as trustworthy and carefully accurate. The depth of water of course is a very

* The double rope of the *harat* is called *mál*; the wooden transverse pieces in which the *tindás* are fastened are called *rédí*; the ends of these perforate the two parts of the *mál*. The *bár* is the wheel on which it lies.

Chapter IV, A.

Agriculture and Live-Stock.

important element in determining the supply; another, less so perhaps but still important, is the abundance of the spring supply; as a water-level which falls rapidly is much the same as if it were originally lower. The number of men again at work* makes a difference necessarily, and also the size of the *charsá*.† A big one though it moves a trifle more slowly on the whole yields more. The general result, so far as it goes, shows the supply yielded by a fair *charsá* to be greater than that of a Persian wheel.

How much water is required to water a given area.

"It is difficult to estimate the quantity of water required to water a given area, but at different rates of depth some comparative idea may be obtained as follows, taking 340 maunds as perhaps the fairest average. This gives $340 \times 82 = 27{,}977$ lbs, nearly. A cubic foot of water weighs 1,000 oz. avoirdupois $= 62\frac{1}{2}$ lbs, so that there would be $447\frac{1}{2}$ cubic feet nearly poured out in one hour. At an estimate of 1 inch depth this would give very nearly an acre in a day of eight working hours. The actual extent irrigated is less than this considerably, and the depth I should say greater."

Area protected by a *láo* on the average.

The estimate of the extent of land which can be considered thoroughly protected by a one *láo* well necessarily differs inversely according to the depth and rapidity of exhausting the supply. The *zamíndárs* themselves perhaps think the latter point more important than the actual depth from the surface. Nothing delights a good husbandman more than a strong equable spring of water which he can work at for hours without reducing it more than a foot or so; *pakká páni* then he calls it; *kachcha páni* on the other hand he complains of greatly, where the water level sinks sometimes as much as six or seven feet in a few hours. In a good many villages the wells cannot be worked continuously all day; rest has to be given to them to get the supply replenished by percolation; ten acres on the average is perhaps a low estimate of protection; the *zamíndárs* will allow this; about eleven will give probably more really accurate results.

Cleaning out wells.

The cleaning out of wells depends much on their position, as, of course, one protected by a masonry coping (*man*) standing a foot or two above the surface of the ground prevents sand and earth from falling in. The Persian wheel, which generally has nothing of the kind, requires much more attention in this respect than the *charsá*. The latter, if kept fairly full of water, needs cleaning only once in five years, and often not then. The task, when necessary, is performed by the owner or his tenants.

Sinking a wells.

The expense of sinking a well of course varies very greatly according to the kind of soil in which it is made and the depth at which water is met with. In Sunipat there are three degrees noted; one of the Bángar soil (*oarh*), the second is the higher Khádar, the third the land immediately bordering on the river. In digging wells in the Bángar, the soil turned out is very generally stiff loam, with here and there a stratum of *kankar*. Occasionally a small depth of sand intervenes, to be succeeded lower down by the loam as above. In the Khádar this soil is not found, or found only in thin strata; the subsoil is mainly sand. Of course this alters the conditions of excavation. A common plan of sinking a well is as follows: The

* Only one man at a time can work at the bucket, but at the pegs of the *láo* there are sometimes two, sometimes one only.

† The size of the *charsá* is reckoned by the number of *muthis* or hand-breadths it measures when held suspended vertically.

Chapter IV, A.

Agriculture and Live-Stock.

Sinking a well.

earth is excavated down to the spring level; then the *ním-chak* is made, a round frame either of *kíkar, lasora* or *dhak*; the wood is about 1½ foot broad, and a span thick (*i.e.*, high). The pieces are fitted closely together like those of a wheel, and are fastened with nails. On this is built up the masonry cylinder (*golá* or *kothi*). This generally extends beneath the surface from 14 to 17 *háths* and above it some 12 or 13 *háths*. On the top of this cylinder a rough frame-work is placed consisting of four large beams, two one way and two another (*dháran*.) On these is heaped up a mixture of mud and earth as a make-weight, and the earth dug out from below is also put on it. The weight thus accumulated sinks the well down to the surface or further. It is then built up again. The old way used to be to sink the cylinder down to the real spring level; but now the usual way is to sink it as said before, down some 14 or 15 cubits, and then bore down in the centre of the cylinder with a *ballí* made of two or three beams fitted together and headed with a sharp point. Across this *ballí* is fitted a cross beam (*dandílá*) to both ends of which is fastened a well-rope. This is passed over a pulley (*chák* or *bháwan*), as at the well, and then the *ballí* is alternately raised and let down, sinking down at each time lower and lower till the real spring is arrived at. This is at 52 *háths* beneath the surface, and this point, the natural spring level (*sár*), is called accordingly *báwaní*. In the Khádar water is found at 14 *háths*, and the cylinder goes some seven or eight *háths* below this point. The *ním-chak* is made by the village carpenter; the masonry work requires a mason who is found only in the towns or larger villages. In the Khádar the excavation is made by the Játs themselves. In every village are several fellows who can dive (*gote már*), and they go down into the water with the *khássa*, which brings up each time enough earth to give hard work to some twenty men to raise it up on to the *dháran* or platform. The divers are of every tribe and caste. In the Bángar the plan used to be the same, but since the canal irrigation has rendered the sub-soil percolation more copious, few men not making a regular trade of it can stand the enormous flow of water that comes in below a certain depth, so that the diver who can work in a Bángar *golá* generally becomes known; he has also the dignity of a special name* *Síhá*. They are generally of the Jhínwar caste. They get about 12 annas or Re 1 per foot of excavation, with a *pagrí* at the finish. For beginning the work of course a lucky day is necessary. The *parohít* or some other person possessing the necessary learning is called in, and generally getting something for his pains, either a rupee, or some meal and *ghí*,† points out the propitious season. It is incumbent on the husbandman at all events to make a beginning on that day; if he cannot conveniently spend much time he must at least dig not less than five hoe-fuls with his *kassí*. The undertaking thus auspiciously begun may then be intermitted, if need be, for a month. There is a practice still obtaining in some parts of placing five vessels full of water on the spot chosen for the well. After standing for a whole night, if they are found full in the morning, the place is reckoned lucky. If not

* *Jhámí*—the tool is called *jhám*.
† When food is thus given it is called *sídhá*.

Chapter IV, A.

Agriculture and Live-Stock.

Sinking a well.

full, expectation of good water is unreasonable. Some of the intelligent *zamíndárs*, however, doubt whether this is thoroughly reliable. A more reasonable custom is that of distributing alms, large or small, on the completion of the undertaking. When asked what would happen if this is not done, the *zamíndárs* reply—"who would omit such a good precaution? The work of danger is finished, and thanks are reasonable." The speculative character of the risks in sinking a well is shown by the proverb: "To dig a pond requires but money. But Rámá's aid (is necessary) for a well."

Quality of water.

Distinctions are drawn here, as elsewhere, as to the quality of the water, which may be sweet (*míthá*), brackish (*malmalá*), or salt (*namkín* or *khárá*.) The salt water is of course not good for irrigation; but the brackish wells often produce the finest crops, nor is this good effect confined alone to inferior soils. On superior soil also it is considered best of all to have the first watering (*kor* or *korwá*,) made by brackish water, and then water with sweet. Where there are two wells within a practicable distance of each other, the water of both will be interchanged in this way: the brackish water irrigating the lands of both for the *kor*, and then the sweet water coming over all in its turn. The reason given for this is that the land requires some degree of saltness; it is alleged that there will be a perceptible difference in the yield of two fields side by side, one of which has the *malmalá kor* and the other the sweet. The appreciation of salt as a manure is shown from the fact that it is common to scrape the ground round the *ábádí* and carry it on the fields, one cart-load being a dose for two *kachá bighas*. Distinction is even made in the quality of land from its trees; the best *banjar* is shown by the growth of *dhák*; then *bánsá* (*Tephrosia purpurea*), and lastly *kair*. The *bánsá* itself is known as a salt plant, and consequently the land near the plant for a short time is productive, but afterwards becomes what it naturally would be.

Irrigation from *bands*.

Irrigation from *bands* is a characteristic feature in all parts of the district lying under or near the hills. The principle is that of concentrating the rainfall so as permanently to moisten a given cultivated area, allowing surplus water to run or drain off; and applications of this principle were successfully made on a large scale by the former rulers of the country. In no respect perhaps does the civilization of the Mughal Empire show better than in this of artificial irrigation. In a report of 1848, written by Mr. E. Battie, in charge of the Najafgarh *jhíl* works, there is an interesting account of two of the largest of the hill circle *bands*, Chhatarpur and Khirkí. But there are numerous others, which only a good local knowledge gives an acquaintance with, for most of them are in a semi-ruinous condition, and not a few are in out-of-the-way corners, among ravines or on the slope of not very accessible hills. Some are evidently too far gone for repair, some are not worth it,* but others almost certainly are. It gives a sense of dreary desolation to ride through these gaping holes in what

* There is a printed correspondence on this subject with Government letter, No. 2,927 I, dated 10th July 1877.

are still magnificent lines of works which might be so beneficial and remunerative.

List of *bands*.

On the next page is given a list of all but very petty *bands*, showing the locality and the area affected by them, with some other facts. One or two of the large earth work *bands*, and notably that of Tilpat, have been very much injured by the construction of the Agra canal, the line of which comes down athwart the catch basin of the *band* in one part. It may be noted that there are places here and there where probably new *bands* might be constructed with success. There are two or three places at the foot of the hills on their Ballabgarh side, where it is almost impossible to think that water might not be thus advantageously stored.*

Minor *bands*.

There are besides the hill *bands* in the north-west of Ballabgarh, the south-west of Delhi, and the east centre of Ballabgarh, several minor *bands* made to catch the drainage near Dhauj and Pálí, but these apparently are very happy-go-lucky concerns, and are not at present of any considerable importance. There is also, or rather was, a *band* in the boundary of Pugthallah in the north-west of Sunipat *tahsíl*, which the men of that village either erected or, as some say, strengthened in the stormy days of the mutiny. The canal officers, on the ground that a natural drainage of the country was obstructed, have now obtained the demolition of the *band*. This *band* did good to the lands of Pugthallah by keeping the water *off* the land, allowing moisture to come only by percolation.

Najafgarh *jhíl*.

The Nagafgarh *jhíl* and its drainage works are described in the Settlement Report. The system of cultivation pursued by the villagers bordering the *jhíl* is suited to the circumstances under which they are placed. Experience has taught them the level which the waters usually attain; and with reference to this, is the disposition of their crops. That is, from the higher grounds they obtain the common *báráni* crops; their cotton is sown out of reach of anything but extraordinary floods; their sugarcane fringes the whole *jhíl*, and is kept accurately a little above, but close to, the ordinary level of the *jhíl* water, so as to facilitate the irrigation of the plant without actually subjecting it to injury from submersion; the low grounds in the immediate vicinity of the *jhíl* are sown with gram and wheat, and also as the water retires in consequence of being expended in irrigation, by partial drainage, by evaporation, &c., the rich soil laid dry is ploughed up, and produces a fine crop of wheat.

Canal-irrigation.

The canal-irrigation is perhaps the most important of all; important both for good, and for ill. Irrigation from the Agra canal is, and perhaps always will be, insignificant, owing to the high level of the land in this district through which it runs. But the water of the Western Jamná Canal has for many years been a factor of enormous power in determining the condition of the *zamíndár* in a large and densely populated portion of the district.

* Mr. Maconachie writes in 1884: "Since this was written a change has taken place, the limits of which it is at present difficult to estimate. Many of the old *bands* have since the beginning of 1883 been put into thorough repair; other *bands* have been made, and there are other schemes coming on for early execution. About half a lac of rupees have been or are being spent, and there will be an increase of produce on the least protected parts of the district of about that amount. And we have not done yet half what can be done."

Chapter IV, A.

Agriculture and Live-Stock.

List of *bands*.

No.	Name.	Tahsíl.	Remarks as to area irrigated, condition, &c.
1	Ambarhai ...	Delhi ...	Estimated to irrigate 215 acres, but this *band*, has been broken, and is not worth repair, in fact it probably did more harm than good.
2	Arangpur ...	Ballabgarh ...	About 130 acres are moistened by this *band*, which is a natural basin, and thus is easily kept in fair working order.
3	Bijwasan ...	Delhi ...	About 300 acres were moistened by this *band*, but it is broken now, and should not be repaired, as it does more harm than good.
4	Chhatarpur ...	Ballabgarh ...	A fine *band*, moistening some 500 acres; broken and wants repairing. If it is not repaired, deterioration of the neighbouring lands is certain.
5	Gwálpahári ...	Gurgáon ...	Another fine *band*; the lands of six villages would benefit from its repair, and will be damaged by its continued broken condition.
6	Hauz Khás ...	Ballabgarh ...	About 40 acres here form a *hauz*, or bath-tank, in fair preservation, and there is no chance of damage.
7	Khirkí ...	Ballabgarh ...	This *band* is broken, and might well be repaired; it would prevent the formation of ravines and fissures over a large extent of ground.
8	Mahpálpur ...	Delhi ...	A very fine masonry *band*, but broken and neglected; would moisten 200 acres if well looked after, and preserve other land too.
9	Mánakpur ... Basantnagar.	Delhi ...	A first-rate position for a *band*, but broken now in the middle; still moistens about 100 acres. Ravines are forming near the break—a masonry *band*.
10	Naráina ...	Delhi ...	A *kachá band* made in 1861, and broken in 1875. No need to repair it; it is not in a good place.
11	Pálam ...	Delhi ...	A large work, broken, and not fit to be repaired. If *bands* are made on this side of the hills, they should be made higher up, *i. e.*, more to the east than this line.
12	Rajokhri ...	Delhi ...	A very strong masonry *band* of ancient make, long since partially broken; now it would be difficult to repair, as deep ravines have formed.
13	Sultánpur ...	Ballabgarh ...	A *pakka band* repaired by the *zamíndárs*; somewhat broken but not much, and will be now doubtless repaired. Moistens some 40 acres.
14	Tilpat ...	Ballabgarh ...	A large *kachá band*, made in 1861; broken by the line of the Agra Canal. It still moistens some land, but not much.
15	Tughlakábád ...	Ballabgarh ...	Two *bands*, one an old one, the other made in 1861; broken, but might well be repaired, perhaps by the *zamíndárs*; about 110 acres moistened by them.
16	Yáhyánagar ...	Ballabgarh ...	A *kachá band* made in 1861, and still in good repair. Some *abíáná* is taken here.

Irrigation by *tor* and *dál*.

Of the two modes of irrigation, that of flow (*tor*) is far more common than by *dál* or lift. Irrigation by lift is more advantageous in this, that it implies a higher level of land to be irrigated, and a greater labour in irrigating it, so that as a rule a *tor* village is likely to be more water-logged than a *dál* one. The average acreage under *dál* irrigation for seven years in the *kharíf* was 1,617 acres as compared with 38,690 *tor*, and in the *rabí* 4,545 as compared

Abiáná (Water-rates.)

with 33,978 *tor*, The rates charged as *ábiáná* on the canal vary according to the class of crop, as below*:—

		I. Sugarcane. Gardens.	II. Rice. Tobacco. Opium. Vegetables. Water-nuts. (Singháras)	III. Indigo. Cotton. All rabí crops. Toriá.	IV. All kharif crops, not specified above.	V. A single watering before sowing or to fallow-lands.
PER ACRE.	By over flow.	Rs. 5 0 0 per crop. per annum.	Rs. 3 0 0 per crop.	Rs. 2 4 0 per crop.	Re. 1 10 8 per crop.	Re. 1 0 0
	By lift	Rs. 3 5 4 per crop. per annum.	Rs. 2 0 0 per crop	Rs. 1 8 0 per crop	Re. 1 0 0 per crop.	Re. 0 10 0

Canal irrigated area.

The tabular statement on the next page shows the irrigation from the canal for the seven years ending 1877-78.

Owner's rate how fixed.

Under the new arrangement owner's rate is to be taken at one-half of the *ábiáná*: and this is to be taken per crop, so that *dofasli* land will pay owner's rate twice.

Crop.	1880-81	1881-82.
Kangni ..	258	247
China ...	266	218
Mattar ...	1,607	1,137
Másh (Urd) ...	4,009	3,416
Múng ...	4,425	3,947
Masur ...	542	306
Arhar ..	13,654	1,188
Coriander ...	863	549
Ginger ...	...	2
Chillies ...	5,145	5,712
Other drugs and spices. ...	857	629
Linseed ...	2	29
Mustard ...	3,783	3,738
Til ...	526	463
Tára Míra ...	5,904	5,363
Hemp ..	461	488
Kasumbh ...	279	191
Other crops ..	2,643	14,045

Principal staples.

Table No. XX shows the areas under the principal agricultural staples. The remaining acres under crop in 1880-81 and 1881-82 were distributed in the manner shown in the margin.

Crops and areas under each.

The principal crops of the district, with the areas under each, as ascertained during the recent Settlement measurements, are given at the top of page 113.

The largest acreages, it will be seen, are as follows :—

KHARIF.		Acres.	RABI.		Acres.
Jowár	...	1,01,589	Wheat	...	1,09,222
Bájra	...	90,320	Barley	...	44,141
Sugarcane	...	30,782	Gram	...	43,265
Cotton	...	28,835	Barley and Gram	...	33,473
			Wheat and Gram	...	24,527

Some crops, such as sugarcane and rice, are hardly ever grown except on irrigated and manured soil, while others are for the most part grown on land dependent on rain for its moisture. Among these last are *bájrá*, *jowár* and *channá*.

Tabular statement of agricultural operations for various crops.

The tabulated statement on page 114 gives the leading facts respecting the cultivation of the chief crops; while a more detailed account of the cultivation of melons and sugarcane, both of which present in a way special features, will be found at page 113.

* Sanctioned in No. $\frac{617}{I}$ of 10th September 1873, from Government of India, Public Works Department, to Joint Secretary to Government, Punjab, and published in Gazette, No. 4,068,I of 29th September 1873.

Chapter IV, A.

Agriculture and Live-Stock.

Canal-irrigated area.

YEAR.	KHARIF.							RABI.							TOTAL.	
	Villages.	AREA IRRIGATED IN ACRES.			AMOUNT OF WATER-RATE.			Villages.	AREA IRRIGATED IN ACRES			AMOUNT OF WATER RATE.			Area irrigated.	Amount of water rate.
		Tor.	Dál.	Total.	Tor.	Dál.	Total.		Tor.	Dál.	Total.	Tor.	Dál.	Total.		
1871-72 ...	208	43,691	1,535	45,226	1,54,885	2,810	1,57,695	203	57,733	6,554	64.287	1,30,982	8,130	1,39,112	1,09,513	2,96,807
1872-73 ..	202	43,899	2,074	45,973	1,67,680	3,906	1,71,586	198	29,594	6,725	36,319	67,455	7,756	75,211	82,292	2,46,797
1873-74 ...	194	38,852	1,841	40,693	1,54,207	3,754	1,57,961	175	13,870	6,952	20,822	31,559	7,453	39,012	61,515	1,96,973
1874-75 ...	155	28,329	1,393	29,722	1,07,234	3,427	1,10,661	186	39,676	3,006	42,682	80 009	4,542	84,551	72,404	1,95,212
1875-76 ...	188	34,180	1,360	35,540	1,23,637	3,288	1,26,925	179	21,407	1,396	22,803	42,115	2,130	44,245	58,343	1,71,170
1876-77 ...	191	38,327	1,164	39,491	1,39.469	3,060	1,42,529	179	28,381	3,318	31,699	58,047	5,008	63,055	71,190	2,05,584
1877-78 ...	197	43,551	1,954	45,505	1,55,026	3,871	1,58,897	197	47,185	3,862	51,047	1,02,865	6,014	1,08,879	96,552	2,67,776
TOTAL ...	1,335	2,70,829	11,321	2,82,150	10,02,138	24,116	10,26,254	1,317	2,37,846	31,813	2,69,659	5,13,032	41,033	5,54,065	5,51,809	15,80,319
Average ...	191	38,690	1,617	40,307	1,43,163	3,445	1,46,608	188	33,978	4,545	38,523	73,290	5,862	79,152	78,830	2,25,760

Crops and areas under each.

Statement of area in acres under each crop at the time of Settlement measurements.

		Delhi.	Ballabgarh.	Sunipat.	Total.	REMARKS.
KHARIF	Cotton	4,939	11,521	12,375	28,835	
	Vegetables	457	253	391	1,101	
	Chillies	347	58	1,173	1,578	
	Sugarcane	15,714	129	14,939	30,782	
	Rice	3,962	1	7,856	11,819	
	Juár	30,616	24,985	45,988	1,01,589	
	Indian-corn	1,018	1,450	5,572	8,040	
	Bájra	45,836	36,535	7,949	90,320	
	Til	5	8	7	20	
	Másh	435	61	717	1,213	
	Hemp	38	69	48	155	
	Charí	603	923	...	1,526	
	Gúár	3,457	2,144	9,579	15,180	
	Lobia ...	60	1	3	64	
	Italian Millet ...	5	...	71	76	The difference between the total here given and that entered as cultivated *viz.*, 5,19,417, is due to the *dofasli* land which here appears twice.
	Moth	1,474	2,009	3,732	7,215	
	Múng	593	97	103	793	
	Chená, &c.	126	1	139	266	
RABI.	Wheat	30,806	21,313	57,103	1,09,222	
	Wheat and Gram ...	8,287	2,190	14,050	24,527	
	Wheat and Barley ...	5,301	4,838	690	10,829	
	Barley	15,155	25 824	3,162	44,141	
	Barley and Gram	9,472	21,839	2.162	33 473	
	Gram	23,818	2,964	16,483	43,265	
	Melons	1,448	55	51	1,554	
	Ajwáín, Saunf, &c. ...	350	59	83	492	
	Tobacco	560	464	262	1,286	
	Onion	30	24	37	91	
	Safflower	71	142	75	288	
	Sarson	118	54	247	419	
	Taráh	560	643	1,553	2,756	
	Masúr	8	79	13	100	
	Arhar	238	52	...	280	
	Peas	789	439	201	1,427	
	TOTAL.	2,06,696	1,61,224	2,06,814	5,74,734	

to 121. The estimates of produce given in the following tables are not too high for good soil, but are too high for the *general* average of the whole district.

Cultivation of sugarcane.*

Sugarcane is the most important and profitable crop of the *kharíf* harvest in the Delhi and Sunípat Bángar tracts. The average acreage under cane in the district for the last ten years is given as 4,347. The land taken is the best in the village, that is to say, some of the best is taken every year; it is a sign of weakness of resources when cane follows cane on the same ground.† Nor without manuring is the cultivation profitable. Cotton is a first-rate crop to follow cane,‡ and then after the cotton cane can be planted a second time if manure is available, otherwise wheat will grow well without it. It is not usual to try for a *rabí* crop when cane is to be planted in the spring; if this is done the latter will suffer by being planted late (*pachétr*). Ratooning (leaving the roots to produce a second crop in the succeeding year, called *muridaík*) is uncommon now, though in old times it was often practised. The change may be put down to the decreased fertility of the soil, or, as the *zamíndárs* themselves say, to the increase in resources as shown in the greater power to buy seed, and the greater number of hands avail-

* See Mr. Butt's account of sugarcane cultivation in Sháhjehánpur (Revenue Reporter N. W. P.) 1874, Vol. III. No. 1.

† According to the rhyme : "To plant cotton after cotton *and sugarcane after sugarcane*, to attend to other people's advice, these three things ruin a house."

‡ So the rhyme :—"If cotton follows cane, no bare place will remain."

Chapter IV, A.

Agriculture and Live-Stock.

Tabular Statement of agricultural operations for various crops.

Crops.	Harvest.	When sown	Sown after watering (*Palewá*) or without.	Quantity of seed per *pakká bigha*	Number of ploughings.	Number of hoeings or cleanings.	Is manure used or not.	Irrigated or unirrigated land.	Month of harvest.	Produce per *pakká bigha*	Preceded and succeeded by what crops.	Remarks as to weather, rain and soil required.
Jowár ...	KHARIF.	Asádh ..	Without watering.	6 sers ...	2 to 5	1	Manure not used.	Unirrigated.	Kátik ...	3 to 6 mds.	Preceded by wheat, and succeeded by gram.	Good rain is wanted for *jowár* and *bájrá* in the early rainy season July and first part of August.
Bájra ...		Asádh ...	Without watering.	2½ sers ...	2	1	Manure not used.	Unirrigated.	Kátik ...	3 to 6 mds.	Preceded by wheat, and succeeded by wheat or barley.	Of the two *bájrá* is generally sown on the poorer soil. The character of *báráni* land may be distinguished in no small degree by noticing this.
Rice ...		Asádh ...	Without watering.	7 sers ...	6	2	See Wheat.	Irrigated ...	Asauj and Kátik.	3 to 25 mds.	Wheat and gram—(*gochaní.*)	Is grown in only the more swampy villages of Sunipat Canal Tract.
Hemp ...		Asádh ...	Without watering.	3 sers ...	2	No cleanings.	Manure not used.	Unirrigated.	Kátik ...	3 mds. ...	Preceded by *jowár* and *makái* and succeeded by wheat, barley, or gram	Not important in this district: it generally is sown as a border to sugarcane.
Indian corn.		Asádh ...	Without watering.	6 sers ...	2	3	Manure used on *cháhí* land.	Unirrigated (3 waterings given in time of drought).	Asauj and Kátik.	10 to 12 mds.	Preceded by barley, or wheat, and succeeded by gram.	
Chillies		Asádh ...	*Palewá*	½ ser ...	5	4	Manure used 240 mds. to a *bigha.*	Irrigated (15 to 20 waterings.)	Kátik ...	6 to 15 mds.	Cotton ...	Grows best in the hot, strong soil of the Delhi Khandrat; it wants much manuring, and very copious irrigation.
Indigo...		Chait and Baisákh	*Palewá*	½ to 1 ser ...	2	Cleanings not required	Manure not used.	Irrigated ...	Poh ...	7 to 15 mds.	No crops specified	Very rarely grown.
Másh ...		Asádh ...	Without watering.	6 sers ...	2	1	Manure not used.	Unirrigated.	Kátik ...	3 to 6 mds ...	Preceded by wheat, barley and gram (*bájhar*) or barley —and succeeded by wheat on land left fallow after the crop is cut.	*Másh, moth,* and *múng* are all light crops, and do well with comparatively moderate moisture.

Chapter IV, A.

Agriculture and Live-Stock.

Tabular Statement of agricultural operations for various crops.

Múng ...		Asádh ...	Without watering.	6 sers ...	2	1	Manure not used.	Unirrigated.	Kátik ...	3 to 5 mds.	Wheat or *béjhar*, or barley—then *múng* after allowing the land to lie fallow for some time; after *múng* wheat or *béjhar*.	See above.
Moth ...		Asádh ...	Without watering	6 sers ...	6	1	Manure not used.	Unirrigated.	Kátik ...	3 to 5 mds.	Preceded by *béjhar*, and succeeded by *múng*; after *múng béjhar* or barley.	See above.
Cott uo	KHARIF.	Chait to Asádh.	Do., *Palewá* if sown in Chait.	7 sers ...	3 to 5	4	Manure used on *cháhi* land only.	Irrigated (3 or 2 waterings)	Asauj to Mangsir.	*Cháhi* 3 or 4 mds. *Báráni* 1¼ to 2 mds.	Preceded by wheat, and succeeded by cotton—generally 6 month's rest allowed.	Extensively grown, but seldom of fine growth, or very good quality; the rain for it should be early—and the season not too cold at the time when the picking begins.
Sugarcane		Phágun and Chait.	*Palewá*...	18 *púlís* each *púlí*=164 *gandás* (bits of cane.)	5 to 10	5 to 9 or 10	Manure used.	Irrigated (5 to 8 waterings with rain; 15 or 20) (but without.) [See also Appendix IV.]	Manghsir to Chait.	10 to 40 mds. (*Gur*.)	Cotton.	
Wheat...		Kátik ...	*Palewá*, if the soil is *dofasli*; otherwise, without it	21 to 30 sers.	6 to 9	*Cháhi*—2, *Báráni*—1,	Manure used on *cháhi* land not on *báráni*.	If irrigated, 6 waterings are given.	Baisákh	*Cháhi*—10 to 13 mds. *Báráni*—5 to 8 mds.	*Bájra* or *juár*. If preceded by *bájra*, wheat will grow better and yield a good out-turn.	Wheat is not grown generally except in good soil, and there are various distinctions drawn in some parts as to quality of seed.
Barley...		Kátik ...	See above.	15 to 21 sers.	6 to 9	*Cháhi*—1, *Báráni* none,	Manure used on *cháhi* sometimes on *báráni* also.	As above ...	Chait ...	*Cháhi*—11 to 16 mds. *Báráni*—6 to 9 mds.	Bájra or *jowár* (see above).	Barley stands to wheat as *bajra* does to *jowar*—a zamindar will rarely grow barley if he thinks the ground will grow wheat well.
Gram ...	RABI	Asauj ...	Without watering	12 to 15 sers.	3	No cleanings.	Manure not used.	Unirrigated.	Chait ...	5 to 9 mds.	Preceded by *jowár*, and succeeded by the same.	A light crop, wants early rain, and the winter rain (*mahâwat*,) and a gentle equal wind. A dry blast withers the plant.
Tobacco		Mágh ...	After watering	2 sers.	5	3	Manure used as for wheat.	Irrigated (20 waterings.)	Jeth ...	15 to 20 mds.	Preceded by cotton, and succeeded by *jowár*.	Like pepper in preferring the dry, hot soil of the *khandrát* and copious waterings.

Chapter IV, A.

Agriculture and Live-Stock.

Tabular Statement of agricultural operations for various crops.

Crops.	Harvest.	When sown	Sown after watering (*palewá*) or without.	Quantity of seed per *pakká bigha*	Number of ploughings.	Number of hoeings or cleanings	Is manure used or not.	Irrigated or unirrigated land	Month of harvest.	Produce per *pakká bigha*	Preceded and succeeded by what crops	Remarks as to weather, rain, and soil required.
Sarson ...	RABI.	Kátik ...	See wheat	1 ser.	6	No cleaning.	See wheat.	See wheat.	Baisákh	3 to 5 mds.	See Wheat	This brings out the salt of the soil, which tobacco likes exceedingly.
Chíná ...		Mágh ...	See wheat.	½ ser to ¾ ser.	6	3	See wheat.	Irrigated (15 waterings.)	Jeth ...	12 to 15 mds.	Preceded by cotton or *jowár*, and succeeded by *jowár*.	A very rapid crop, and requiring copious irrigation, said to show bad cultivation.
ons.		Mágh ...	Without watering.	½ ser.	6	3	Manure used.	If irrigated, once, but it is generally unirrigated being grown in moist lands. (See Appendix IV.)	Jeth ...	50 to 250 mds.	Preceded by *makái*, succeeded by the same.	

Cultivation of Sugarcane.

able for labour. There are three kinds of sugarcane known in the district.

(1.)—*Lálrí*—said to be the original kind, and considered the best as no insects attack it. This is the only kind actually used in the district.

(2.)—*Miratí*—very productive and white, but if the *gúr* is kept long it gets worms, and it is weak also in the rains, and sometimes falls.

(3.)—*Soratha*—white and productive. Good for sucking, but sticky. Not so subject to worms as *miratí*.

Paunda, or *ganna*, is distinguished from the ordinary sugarcane by its thickness. It requires more water for its cultivation, and *gúr* is not made from it. Its only use in fact—often a very profitable one—is for eating; it is sold in the bazar at prices varying from ¼ to 1 or even 1½ anna the stick. The kind first sown is *miratí*, then *soratha*, and *lálrí* last. *Miratí* is quickest is springing. A speciality is said to exist in *lálrí* that it can be reproduced from any knot of the stalk (*ganda*), whereas for *miratí* and *soratha* only the *top* knot of each stalk will do.

Sugarcane for seed is put in clamps (*bijghara*) in Phágan, where the earth keeps it moist and fresh, a damp situation being considered good. What is kept in the house is for use; it does not keep long. The ploughing generally begins in June, unless there is a crop tried for in the *kharíf* preceding the cane crop. If a *zamindár* has enough ground, he will avoid doing this. When the *kharíf* crop is taken, the ploughing for sugarcane begins in (Poh) December, and is continued at intervals according to leisure and other circumstances, the number of times varying from five to twelve. The first two ploughings may well be made one directly after the other, but the subsequent ploughings should come at intervals. For the first ploughing, either rain or a first watering (*palewá* or *paléó*) is necessary. Sometimes the land is dug (wiih a *kasí* or *kahí*) for the first time, and this is fully equal to two ploughings. No cash estimate of the cost of this can usefully be made, as it is never done by hired labour.

The quantity of manure used is very large; from three to six four-bullock waggon-loads go to a *kacha bigha*. This at the lowest estimate, gives $3 \times 3 \times \frac{8}{5} \times 20$ maunds = 288 maunds = nearly 11 tons to an English acre. The *zamíndárs* urge strongly, that without such manuring the land will not be fairly productive. The time for putting in the manure begins in Mágh, and goes on to the end of Phágan, and sometimes even after planting. After manuring, the land is ploughed, unless of course it has been sown. Ploughing takes place in the end of Phágan (February, March) and may be continued through Cheyt, but the best time is the beginning of the latter month. Water is given before planting. Furrows are made regularly along the field, and a boy follows the plough, putting in the seed pieces of cane (*gandírí*), which must have one or more points in each piece, horizontally at regular distances,* usually rather less

* The way of calculating the distance is by counting the number of *pulis* (or bundles), planted in a *kacha bigha* (5-6 of an English rood); seven bundles are a large number, making of course the intervals smaller, six a very frequent one. The

Chapter IV, A.
Agriculture and Live-Stock.
Cultivation of Sugarcane.

than a foot along the furrow. The seed-stalks are taken out of the clamp; one man cuts it up, or rather two, as one cannot do it well alone. Another man carries it to the place where it is put in; four or five are wanted to plant for one plough. There is, however, no lack of hands, as all the young boys of the family help in this, in order to get the holiday food, which is given on planting day. The food consists of rice, sugar, and *ghí* and mixtures of these, and such food-giving is called *Máh Kálí* or *gúr bhata;* the work begins in the morning, and goes on till it is done. Three yoke of oxen can get through ten *kacha bighas* a day. One yoke ploughs, and the other two follow with the *sohágá* (clod crusher). Water is given a month after planting, and, if the rains are good, three subsequent waterings are enough; if they are not, as many as five may be necessary at intervals of a month. Cultivation of cane by well-irrigation is not uncommon in the Khádar of Sunipat, but is not usually if ever met within the Delhi *tahsíl.* In Ballabgarh, there are three or four villages which have it. Delhi, too, has some in the Dáhar circle, from natural flooding. A fair well may water ¾ *bigha* in a day.

Hoeing is carefully kept up; the number of times depends much on the character of the season, and varies from five to nine or ten. The first time comes a few days only after planting. A man's fair work per day at hoeing is put at three *biswas.* When the canes get high, they are generally tied together at the top. Cutting begins in October; it is a practice for Hindus not to begin till after the Dassehrah. Hired cutters get Rs. 3 a month and their food, but the *zamíndár,* unless lazy, does much himself in this. A two-ox waggon should cart one *bigha's* cane in a month, but the animals do other work probably besides. Rent paid by *zabti* is about Rs. 5 per *bigha,* but in some villages it goes even up to Rs. 9. It is taken at the time the Government revenue falls due, and does not depend on the quality of the crop. No difference is made in the rent, whether in the previous *kharíf* another crop was taken; but when the land was left fallow it is called *tapar.*

The expenses of cultivation may be thus summed up:—

Ploughing ten times				10	0	0	*pakka bigha.*
Manure				5	0	0	
Seed				5	0	0	
Irrigation				4	2	0	
Price of water	3	2	0				
Cleaning of water course	1	0	0				
Hoeing				4	0	0	
Tying up canes				2	0	0	
Cutting and stripping				7	0	0	
Rent				6	0	0	
Carriage to the *kolhú*				3	0	0	
Planting (estimated)				2	0	0	

The *kolhú* or sugar mill is made of four kinds of wood, first quality *sál,* second *kíkar,* third *siris,* fourth *farásh; kíkar* is the one most commonly used. The mechanism of the *kolhú* is the

way of getting at the *púla* is rather curious. As many sticks as laid down in a line make up 21 *háths* (or cubits) make a *parya,* and either 20 or 21 *paryas* (according to two different standards) make a *pulí;* a rupee will buy three or sometimes four *púlís.*

Chapter IV, A.

Agriculture and Live-Stock.

Cultivation of Sugarcane.

same as in Shahjehanpur;* the names, too, are much alike; *kolhú* is the mill itself, *páth* is the horizontal boom, *làth* or *mohan* is the pestle, and *mánkri* (instead of *maekam*) is the diagonal spar joining the *páth* and the *láth*; *bánkmal* is the piece (not noted in Mr. Butt's description) which springs up from the boom, and receives the lower end of the *mánkri*. The five pieces, therefore, form an irregular pentagon; the *kolhú* standing upright, the *páth* working on its outside edged horizontally, the *bânkmal* stands vertical to the *páth* at its further end; from the upper end of the *bánkmal* springs the *mánkri* inclining to meet the *láth*, which also works slantingly in the *kolhú*.

A *kolhú* complete costs Rs. 80 or Rs. 90, or even more, the work being made as durable and thorough in every respect as is possible to the not inconsiderable skill of the local carpenter. The *láth* often breaks, and must be replaced at the cost of a rupee. It is always made of *kíkar*. The wages of the carpenter who looks after the *kolhú* are considerable.† The produce of about 40 *bighas* of sugarcane is pressed in one *kolhú*; a good many proprietors unite generally in working it. They bring their cane themselves from the field, and put it together, reckoning their several shares by the number of oxen they each have. A *kolhú* lent on hire is said to cost Rs. 7 to the hirer, but it is often more than this. The men who own the cane, almost always own the oxen that work the *kolhú*. Four kinds of work are distinguished in the *kolhú*. Two *pindías* put the short cut pieces of cane (*girariyán*) into the *kolhú*, and take out the cane straw *khói*; one man relieves the other at this arduous work, which is also rather dangerous for any but a left handed person. Wages Rs. 10 to Rs. 15 a month. Two *guriyas* who cook the *gúr*. Four *jhonknewalas* who keep up the fire, and dry the *khói*. Two *muthiyas*, who feed the *pindiás* with cut up canes, put into a basket. The man who sits on the *páth*, driving the oxen, is not a hired labourer but one of the proprietors. Two men are employed with each pair of oxen. The surgarcane is generally cut by the proprietors, or by hired labourers at two annas a day each. The *kolhú* goes on day and night, but the workers are divided into day and night batches. A *matka* holding twenty *sers* is filled with the pressed juice in about an hour; and the oxen do this twice before they get taken off. The juice is thrown into the *kúnd*, a large earthen jar. From there it is put into the *karaí* or cooking cauldron, and is boiled slowly till it becomes pretty thick, and then it is put into a second vessel smaller than the first, and the boiling process goes on till the *gúr* becomes thick and consistent enough to make the *bhélis* or *gur*-balls. These are always four *sers* each. The place where the cooking goes on is called a *gurgót*. It is merely a thatched shed with a hollow floor to allow of the *kasais* being placed in it, and underneath them the cooking-fires. Molasses (*ráb*), and coarse sugar (*shakar*) are not made in this district, or if made, very

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* See foot note to page 113.

† Since this was written the new iron *kolhú* patented by Thomson and Mylne has obtained great popularity in the district. Its superiority is admitted on all sides.

Chapter IV, A.
Agriculture and Live-Stock.
Cultivation of Sugarcane.

rarely; it would of course be a more delicate process than the primitive one above described: yet this too requires care. If the boiling is too prolonged it spoils the *gúr* and diminishes its selling value. Delhi district *gúr* goes to Bághpat, Biwáni in Hisár, and Rewárí and Fírozpur Jhirka in Gurgáon. The *zamíndár* generally manages his *gur*-making himself, and there is no commonly received rate of sale, but Bághpat rates more or less influence the market. There is no custom of *kataotí* as in Sháhjehánpur. The weight of juice turned out is commonly $\frac{2}{5}$ of the sugarcane. The straw is used for burning in the *gurgói*; it is good for nothing else; and from the juice $\frac{1}{5}$ of its weight will turn out in *gúr*.

Cultivation of Melons.

Melons are chiefly cultivated on the sandy soil of the river side near Delhi; the soil considered good is *dumat, (i.e., do matti)* being $\frac{2}{3}$ earth and $\frac{1}{3}$ sand. The cultivators are chiefly tenants, such as Mális, Káchís, Malláhs, and Shaikhs, but in some places proprietors cultivate themselves. Before the crop is sown an agreement, generally in writing, is made fixing Rs. 5 to Rs. 15 per acre as rent for *rabí.* Manure is bought at a rate of Rs. 6 per 100 bullock loads weighing $2\frac{1}{2}$ maunds each when the field is within two miles from Delhi; when it is further off, then from Rs. 7 to Rs. 12 per hundred. 150 loads are required for an acre of land. The cost of manure per acre therefore is Rs. 9 for villages within two miles from Delhi and from Rs. 10 to Rs. 18 for villages beyond this. This includes both cost and carriage. When the manure has been brought to the field the cultivator must buy *púla* bundless of *káns* grass, for fence and screen for the young and tender crop. This will cost him about Rs. 10 an acre, a thousand bundles (*púlas*) being required at Re. 1 a hundred. This screen is called *taota*, and fence *bhet.* Pits are dug in a line at distances of three feet yard square, and $1\frac{1}{4}$ yard in depth. It is not essential to have the depth so great, but as the sand silts in from the side it is generally done. The object is to reach down to the *dumat* soil above spoken of, which is found sometimes at less sometimes at more than this depth. On every line the grass fence is stuck in to protect it from sand blown in by the wind. When the pits are ready, the manure is mixed with earth and thrown into them, and a hollow bed (*tháonlá*) is made in the centre of the pit. Thirty men can thus prepare an acre of ground for seed in one day, and get for it Rs. 7-8 at a rate of four annas per head. Three men are required to sow the seed when the *tháonlás* are ready, and at two annas a day each. Half a *ser* of seed will sow an acre, and costs eight annas. The labourers get into the pits and bury two seeds in each *tháonlá.* On the north side of the bed the screen (*tattí*) is erected. Within 12 days the seed should sprout in every *tháonlá*; where it does not, fresh seeds are sown. When the plants are a month old, they are earthed up by hand to give strength to the roots; three men do the work in an acre of land in one day and are paid four annas a piece. About a fortnight after this the screens and fences are pulled up, and the pits are filled up with loose earth; the *púla* is spread over it and the creeping plant laid carefully on it; ten men will do this in an acre per day costing Rs. 2-8. The grass keeps the plant from getting too dry. The crop is not irrigated, except in years of drought, when it gets water once; the labour of 12 men at two annas each will

Chapter IV, A.

Agriculture and Live-Stock.

Cultivation of Melons.

manage for one acre in a day, generally by digging *kachá* wells on the bank of the river, and then using the *dhenkli*, or watering by hand from earthen vessels. The crop is gathered in May and June, and the crops are watched day and night to protect it from thieves, biped and quadruped. Jackals and wild pigs are fond of melons. Fires are lit, chiefly of the useful grass, which, having done its work, is thus disposed of. If the cultivator does not watch the crop himself, he keeps a watchman to do so at Rs. 4 a month. The cost of the crop and income realized from it may be reckoned at Rs. 50 and Rs. 120 respectively, and, if the cultivator is his own *chaukidár*, the cost is reduced to Rs. 42. In the villages, at some distance from Delhi, Rs. 6 must be added to the cost of manure. On the other hand, land in such villages is obtained at a lower rent, say Rs. 5; while near Delhi the rate of rent is often Rs. 10 per acre. The income is equal in both months, May and June, as in May the fruit is less in quantity but dear in price, while in June it is abundant, but fetches only a lower price.

The items of cost of cultivation per acre are shown here together:—

	Rs.	A.	P.
Manure, 150 loads	9	0	0
Bundles of grass (*pula káns*) 1,000... ...	10	0	0
Labour for digging pits...	7	8	0
Seed	0	8	0
Labour for sowing	0	6	0
Labour for earthing (*thapna*)	0	12	0
Labour for filling up pits and spreading out the grass	2	8	0
Irrigation	1	0	0
Rent	10	0	0
Watchman	8	0	0
TOTAL ...	50	2	0

Government demand is Rs. 4 per acre near Delhi, and Rs. 3 and Rs. 2-8 for lands lying further off the city.

Average yield. Production and consumption of food grains.

Table No. XXI shows the estimated average yield in lbs. per acre of each of the principal staples, as shown in the Administration Report of 1881-82. The average consumption of food per head has already been noticed at page 46. The total consumption of food grains by the population of the district, as estimated in 1878 for the purposes of the Famine Report, is shown in maunds in the margin.

Grain.	Agriculturists.	Non-agriculturists.	Total.
Wheat	417,143	839,570	1,256,713
Inferior grains ...	1,213,508	615,685	1,829,193
Pulses	265,455	410,456	675,911
Total ...	1,896 106	1,865.711	3,761,817

The figures are based upon an estimated population of 608,850 souls. On the other hand the average consumption per head is believed to have been over-estimated. A rough estimate of the total production, exports, and imports of food grains was also framed at the same time; and it was stated (page 151, Famine Report) that there was an annual deficit of nine lakhs of maunds, which had to be supplied by imports of wheat, gram, *bájra*,

Chapter IV, A.

—

Agriculture and Live-Stock.

Average yield.

Production and consumption of food grains.

jawár, rice, and pulses, from Gurgáon, Ambalá, Amritsar, Mirath Rohtak, Bhawání, and Karnál. The rates of produce, as ascertained partly by experiment, and partly by the opinion of the most intelligent *zamíndárs*, are given as Appendix II to Mr. Maconachie's Settlement Report. In the table at pages 114 to 116 will be found other estimates, which Mr. Maconachie considers fairly correct for *good* soil, but too high as general averages. He writes :—

"Taking the average of all estimates obtained during the Settlement, and checking them by my own knowledge, I should give the produce of the principal crops per acre as follows :—

Crop.	Kharif.		Crop.	Rabi.	
	Irrigated.	Unirrigated.		Irrigated.	Unirrigated.
Jowár	......	240 sers	Wheat ...	440 sers	240 sers.
Bájra	......	180 „	Barley ...	480 „	240 sers.
Sugarcane ...	720 sers	360 „	Gram	......	360 sers.
Cotton ...	190 „	110 „	Barley & Gram ...	500 „	320 sers.
			Wheat & Gram ...	480 „	300 sers.

"The above I believe represent the average crops of the district throughout. Of course on some lands the manured and irrigated yield of wheat (for instance) would be much higher. It might be 18 or even 20 maunds, but such a yield is exceptional, and any general estimate founded on figures approaching this would be utterly fallacious."

Live-stock.

Table No. XXII shows the live stock of the district, as returned in the Administration Report. But see below for more accurate figures.

Cattle form an important feature of the agricultural economy* of the district. An ordinary Ját will certainly have his yoke of oxen and a cow or buffalo, or both. A cow gives eight or ten calves, one a year; and a buffalo will give 15 or more. The cattle are milked (*dúhná*) at sunrise; the vessel (*dúhní*) either of earth or of *pítal* is put up in a niche in the wall and some two hours later the milk is warmed up to boiling. The skim comes up, and then the vessel is taken off the fire and put away for use, but the cream (*malái*) is taken away. *Ghi* is made the next day in the churn (*bilomíní*), the milk being curdled with a little *lassí*. Buffaloes' milk is considered richer and stronger than cows' or goats.' Among buffaloes one of a *bhúrá* (dirty grey-brown) colour is the best, though it is rare; its milk is considered especially nourishing.† Cattle are taken out to graze when the sun gets up in winter; in the hot weather buffaloes and bullocks are taken out in the last

* An old saying is "either the teat of the buffalo or the masonry top of the well (is necessary in time of drought)"

† There are several sayings of a very idiomatic kind, which are explained by this. As for the rarity of the colour "a *bhúra* buffalo, a woman with no hair on the top of her head, a winter rain in Poh, these may be, but rarely." Then again as to the strength of the nourishment of its milk. Two men are wrestling together, and one tauntingly challenges the other to come on "have you been drinking the milk of a *bhúrá* coloured buffalo?" And as to the value of the animal, when a man is angry without a cause, the object of his resentment says "have I carried off your *bhúri* buffalo?"

Live-stock.

watch of the night (*pasar.*) Sheep and goats cannot feed when the dew is on the ground; they get worms in the mouth and feet. Water is given about 10 o'clock, and again after this toward sunset; they come home before the sun goes down. In the cold weather water is generally given only once, as of course thirst is less. The following statement shows the number of horned cattle, sheep, goats and mares in the district as compiled from the Settlement Statements:—

TAHSIL.	CHAK.	Plough cattle	Other kind.	Sheep.	Goats.	Mares.	TOTAL.
BALLABGARH.	Khádar Bángar ...	5,480	12,402	412	1,528	266	20,088
	Bángar ...	8,518	20,327	950	3,830	336	33,961
	Dahri Sailábá ...	2,634	3,947	417	621	93	7,712
	Zerkohí ...	2,859	6,700	191	5,339	128	15,217
	Khandrát ...	1,280	3,022	214	806	38	5,360
	Kohí ...	2,841	12,039	123	12,743	30	27,776
	TOTAL ...	23,612	58,437	2,307	24,867	891	1,10,114
DELHI.	Khádar Bángar ...	1,350	4,372	612	182	89	6,605
	Bángar ...	11,200	32,455	2,204	3,225	581	49,665
	Dábar ...	7,115	17,027	728	899	194	25,963
	Zerkohí ...	2,468	6,889	495	675	116	10,643
	Kohí ...	1,776	4,392	86	889	44	7,187
	Khandrát ...	1,033	3,778	520	744	68	6,143
	TOTAL ...	24,942	68,913	4,645	6,614	1,092	1,06,206
SUNIPAT.	Khádar ...	14,209	29,750	4,869	2,831	278	51,937
	Bángar ...	17,847	48,091	3,401	4,451	375	74,165
	TOTAL ...	32,056	77,841	8,270	7,282	653	1,26,102
DISTRICT.	GRAND TOTAL ...	80,616	2,05,191	15,222	38,763	2,636	3,42,422

In connection with the subject of cattle may be noticed the custom of *rorá nikálná*. *Rorá* is a disease of the cattle, as bad as cholera is for men. To do away with it a rope is tied across from one house to another at the entering in at the village; on it a piece of *siris* wood and a *ghará-lid* (*chapni*) are tied in the middle, and underneath it a plough in the ground. A weed, called *bhainsá-gúgal*, is burnt like incense in a fire: its smoke is put on all the animals of the village; it either stops disease or prevents it; on the rope near the *chapni* a red piece of thread and *supárí* (*chhalia*) is fixed; on the day of giving smoke to the animals they eat stale bread so as not to light their own fires. Neither is grinding heard throughout the village that day, which is called *akhtá*. All Hindu *zamíndárs* observe the ceremony, and so do Musalmáns.

Breeding operations.

There is nothing worthy of particular notice about the horses, mules, &c., of the district. The style of mare possessed by the better class of *zamíndár* has improved since the appointment of *zaildárs*, and there are some pretty animals, chiefly brought in from Kaithal and Patiála, ridden by these men, and the Sunipat *zamíndárs* have some good mares. In all perhaps 60 mares might be found fit for branding. Horse and mule-breeding, however, are not much attended to, though there are signs of the possibility of awakening interest in the matter, if it were energetically taken up. Some of the mares are taken to the Government stallion at Patti Kallyána

Chapter IV, B.

Occupations, Industries and Commerce.

Breeding operations.

in Karnal. At present there are only one Government stallion horse, and one donkey-stallion, at Molarband near Badarpur, and at Sikri, both in the Ballabgarh *tahsíl.* These are under the management of the Haupper Stud authorities. The breeding of oxen and cows is chiefly managed by the 'Brahmani' bulls (locally termed *ánkal* and *bijar*); though in one or two places Hissár bulls imported by Government have been let free with good effect. Rams are not of large size, some of the best are used for fighting. There are no horse or cattle fairs held in the district.

SECTION B.—OCCUPATIONS, INDUSTRIES AND COMMERCE.

Occupations of the people.

Table No. XXIII shows the principal occupations followed by males of over 15 years of age as returned at the Census of 1881. But the figures are perhaps the least satisfactory of all the Census statistics for reasons explained in the Census Report; and they must be taken subject to limitations which are given in some detail in Part II, Chapter VIII of the same Report. The figures in Table No. XXIII refer only to the population of 15 years of age and over. The figures in the margin show the distribution of the whole population into agricultural and non-agricultural, calculated on the assumption that the number of women and children dependent upon each male of over 15 years of age is the same, whatever his occupation. These figures however, include as agricultural only such part of the population as are agriculturists pure and simple; and exclude not only the considerable number who combine agricultural with other occupations, but also the much larger number who depend in great measure for their livelihood upon the yield of agricultural operations. More detailed figures for the occupations of both males and females will be found at pages 69 to 78 of Table XIIA, and in Table XIIB of the Census Report of 1881. The figures for female occupations, however, are exceedingly incomplete.

Population.	Towns.	Villages.
Agricultural ...	10,091	247,363
Non-agricultural ...	193,626	192,435
Total ...	203,717	439,798

Principal industries and manufactures.

Table No. XXIV gives statistics of the manufactures of the district as they stood in 1881-82, and Table No. XLVA gives similar figures for the manufactures of the Municipality of Delhi.

Mr. Lockwood Kipling, Principal of the Lahore School of Art, has kindly furnished the following note on some of the special industries of the district :—

"The reputation of Delhi as a manufacturing centre is perhaps greater than is warranted by the actual state of the industries now practised there. Many of the trades for which the city is famous, like, those of Lucknow, Gulburga and Haidarábád, (Deccan) are relics of the Musalman Courts, and only precariously survive. Nearly all are now, so far as their profits are concerned, in Hindu hands. Before it was a Mogul capital Delhi was a Hindu city; and it would seem that in wealth and in social and political influence the Hindus are resuming their ancient sway. And the tendency of the leading castes in modern times is more

Chapter IV, B.

Occupations, Industries and Commerce.

Jewelry.

towards trade as a means of accumulating money than towards craftsmanship. So while the city is growing, and must from its position continue to grow in commercial importance, it is doubtful whether the arts by which it is historically known are equally flourishing.

The jewelry of Delhi was a favourite theme of the early European travellers who visited it. There is now but little scope for the sumptuous extravagances of which they wrote, such as the peacock throne and similar works; but the tradition remains, and one of the special excellences of the Delhi jeweller is still his consummate skill in mounting and arranging gems, sometimes of great price, but also often of little intrinsic value, so as to produce the greatest amount of artistic contrast, richness and variety. In these days this branch of the art once practised on a large and costly scale is confined to smaller articles of adornment. The throne, the belt, the slipper, the spear, the sword, the elephant *howdah* and goad are but seldom incrusted with gold, enamels and jewels as formerly; and most Anglo-Indians know Delhi jewelry as an assortment of lockets, rings, crosses, bracelets and necklaces, as European in their details as in their purpose. Articles made for wealthy natives, even when they preserve traditional forms, are growing noticeably neater in execution, with a neatnees that counts for nothing as art, and more timid in design, while there is less variety of pattern than formerly. European designs are growing popular, especially among those native ladies who have come under the influence of missionaries, or indeed under any educational influence.

The work now produced for native courts is but seldom seen by Europeans, and it is impossible to form a correct estimate of its value. There is no doubt that many costly articles are made, and that Delhi workmen are frequently employed at distant places resetting and repairing such objects.

The telegraph and the modern facilities for travel have brought the precious stone trade of the world together in a way that is surprising to those unfamiliar with its workings. It is now, as always, a somewhat secret branch of commerce. German Jews, trained in Paris, are perhaps the most prominent and leading dealers. There is scarcely a wedding or an accession affording an opportunity for the sale of precious stones that is not telegraphed to Paris, London, St. Petersburgh, Amsterdam, Berlin and Vienna. Delhi and the rest of India are now included in this secret syndicate, and are periodically visited by dealers who come and go unnoticed; so that Tavernier was but the forerunner of a succession of jewel merchants. For pearls, Bombay is a great market; but even there, one of the leaders of the trade, Panniah Lall, is a Delhi man. In coloured stones this city has still a considerable trade, and the greater part of the valuable find of sapphires in the Cashmere territory has been absorbed by the Delhi jewellers. Most of these men are in the hands of bankers, or perhaps more correctly they are the agents of bankers.

The banker of the East, it is unnecessary to remark, adheres to the practices of the guild that are comparatively neglected by the great money-dealers of Europe, and counts jewels among his means of trade and not merely as objects to be kept in a safe. The name of the actual workman never appears in connection with the more costly articles of Dehli production. Some of the most skilful are said to be men of extravagant habits, and all are entirely in the hands of the dealers, who keep them practically enslaved by a system of advances. This indeed is the case in most Indian handicrafts, and the astute Hindu-dealer resembles the London tradesman in his efforts to efface the maker of the goods he sells, and to pose as the actual producer. Even miniature painting on ivory, which would be supposed to be an art where the name of the artist is absolutely essential,

Chapter IV, B.

Occupations, Industries and Commerce.

Jewelry.

is said to be in many cases produced by quite other men than those who sign the pictures.

Enamelling on gold as an accessory in jewelry is here practised, and it is not easy to distinguish the best Delhi work from that of Jeypore.

It is impossible to give any trustworthy figures as to the value of articles that might be classed as jewelry. But it must be considerable, since there are Delhi jewellers, *i.e*, tradesmen who sell Delhi wares, in every large town.

As to the objects produced, there is scarcely anything called jewelry that cannot be imitated at Delhi; and the continual passage of tourists has created a demand for several varieties of native work not strictly belonging to the locality, as well as for articles of English style. Massive rings with one precious stone set in strong open work, and *almost* as well finished as those in a Bond Street window, are now as frequent as the rings with several stones which are perhaps more like the true Delhi notion. Many of these are tastefully arranged and skilfully mounted. The embossed silver work of Madras, with Dravidian figures in relief, known as Swami jewelry, is more coarsely imitated. In the best Madras examples the figures are entirely hand-worked, but they are often made at Delhi by die-stamping, afterwards chased. Filigrain has always been used as an accessory to more solid work, and now the lightness of Genoese or Cuttack articles is sometimes attempted. Silver and silver gilt wire woven into a kind of matting pattern is applied to belts and bracelets. All the varieties of watch chain are imitated, and some adaptations of native chains have been done. The patterns of necklaces worn in the hills are now regularly wrought at Dehli. In gold, suites of amethyst, topaz, turquoise and other stones are made. The gold framework is sometimes twisted or of *babúl* work. This last is one of the oldest and most characteristic forms. The name is taken from the pretty and sweetly-scented flower of the *babul* or *kikar* (*Acacia Arabica*) which is a ball of delicate yellow filaments. It is also called *khár-dar*, or thorn-work. Convex forms, as the centres of brooches, the fringing balls set round miniatures, &c., are studded over with the minute gold points, each of which, with a patience and delicacy of hand that defy European imitation, is separately soldered to the thin plate base. Good, soft gold alone is used for the points, while the base is of slightly inferior metal. The articles are finished by being placed into a sharply acid bath, which produces a clear, mat-gold bloom, that does not long survive wear and tear. Major McMahon says that various castes wore ornaments of this sort before its suitability for objects of English use came to notice. A bolder form of similar work is called *gokru*, and is based apparently on the *bur*. (The cal trap of Indian and also of mediæval European war-fare. A ball studded with spikes thrown to impede the progress of cavalry is also called a *gokru*.) This is worn by Ját men as an earring, and the same treatment is applied to women's bracelet. Among other patterns produced by soldering small details on a base may be mentioned a rose pattern of minute flowers. This is common all over India, but is perhaps most perfectly done in the red-stained gold ornaments of Burmah. The miniature paintings of Delhi are frequently set in gold cable twist patterns as bracelets, necklets and brooches. Small plaques of Pertabgarh enamel, a semi-translucent green incrusted with tiny gold-chased patterns of figures and animals, are also, with true and false avanturine, mounted in a similar way. The almost invariable feature of Delhi work is a thin shell of gold incrusted with better gold, or with stones of some kind and afterwards filled with hard lac. The enamel work is often spoiled by being done on gold too thin to withstand without distortion the heat of the enamel fire.

Chapter IV, B.

Occupations, Industries and Commerce.

Jewelry.

Another speciality of Delhi is the incrustation of jade, with patterns of which the stem work is in gold and the leaves and flowers in garnets, rubies, diamonds, &c. For examples of the best of older work we must now go to the great European collections, where are objects of a size and beauty now seldom met with in India. The mouthpieces of *hookahs*, the hilts of swords and daggers, the heads of walking-canes, and the curious crutch-like handle of the *gcsain's* or *byragi's* staff, also called a *byragi*, are, with lockets, and brooches for Enlish wear, the usual application of this costly and beautiful work. Each individual splinter of ruby or diamond may not be intrinsically worth very much, but the effect of such work as a whole is often very rich. The *murassia kár* or jewel-setter was formerly often called upon to set stones, so that they could be sewn into jewelled cloths. For this purpose, as when the stone was to be incrusted upon another, as with minute diamonds or pearls on large garnets, a common Delhi form, or on jade, he works with gold foil and a series of small chisel-like tools and fine agate burnishers. The open work claw-settings which leave the underside of a stone clear, have been copied from European work. There is no *dodge* of the European jeweller, such as tinted foil backing for inferior stones or fitting two splints of stone to form one, that is not known to the Delhi workmen. These and many other devices they have *not* learned from Europe, for they are tricks of the trade common to all countries. It is easy to find fault with a certain quality of flimsiness and sometimes gaudiness in the articles unfolded day by day in hotels and dák bungalows all over the country and exposed for sale in shops. But now-a-days people will not pay a sufficient price for good work. The conditions of the trade, too, would seem to be fatal to the production of such masterpieces as we read of and sometimes find. In former times a good workman with his family was dependent on the court or on some wealthy noble. He was often harshly treated, and though he was never suffered to want, he seldom received what would now be considered a fair equivalent for his labour. But he was provided for whether he worked or played, and plied his task with a leisurely consideration and care which is now impossible. The wonder is rather, when the rapacity and also the expenses of the dealer or middleman are taken into consideration, that so fair a value is given for the money spent on Delhi jewelry.

Silversmiths' work.

Turning from jewelry proper to silversmiths' work of the larger sort, it is doubtful whether so much is now done as formerly, and it would seem that Europeans who spend much money on race and other prize cups and similar wares from England, are scarcely aware of the powers of native workmen. A large and bold treatment of silver is a tradition of Indian work, but it is only now coming into favour among the silversmiths of Europe and America. The artistic roughly-chiselled silver of Messrs. Tiffany of New York, which was reckoned a novelty, has some points in common with Indian work, especially in that it was not like most European work, teased with a uniform high finish. Large *hookahs* chased and perforated with elaborate garniture of open work, *chillum* covers, and chains with pendant fishes and other fanciful *breloques*, *abkhoras* or drinking vessels for wealthy Muhammadans, spice-boxes or *pandans* similar to the familiar copper *pandan*, models of cooking pots for wedding presents, and occasionally for wealthy Hindus such sacrificial wares as the *Nandigan* or bull of Shiva with a canopied arrangement for dropping Ganges water on it in worship, or the *argha*, an oval *patera* that represents the female energy, are the principal objects now made. The *chatera* or metal-chaser carries on his trade separately from the smith, who, like the blacksmith of the Siálkot and Gujrát ,damascened work, confines himself to forging and shaping. Beaten foliage like

Chapter IV, B.

Occupations, Industries and Commerce.

that of Cutch is wrought, and the superficial engraving of English silver plate is skilfully imitated.

Silversmiths' work.

No workmen are more careful than Indian gold and silversmiths in the handling of the precious metals. As they use no benches, their filings cannot be preserved, as in English shops, in a leather apron fitted to a drawer; but they file on a wooden standard set in a large dish, and their small crucibles for casting are most carefully handled. Yet it pays some people to buy their ashes and sweepings for the sake of such gold and silver as they may yield. The leading silversmith of Delhi presents his to the poor of his caste, and a respectable sum is annually extracted from the refuse of his shop. It is not often that beaten silver work of the boldest kind is seen in process of execution. That is to say the embossed plates of a silver ***howdah***, the large cartouche-shaped pendants of the necklaces with which the elephant is adorned, the state chairs made for Rájás and chiefs, and similar objects. It is impossible not to admire the boldness with which the metal is handled in many of these works, but it must be admitted that when new they are not free from a touch of vulgarity.

The steps of gradation from such work to the ornaments in common use are really very slight. There is no difference in the processes or tools, and the silversmith who shapes the ***chaunk*** for a native lady's head does not give it much higher finish than the elephant pendant receives. In this, as in the goldsmith's neater craft, the die or ***thappa*** is greatly used with a notable economy of labour. The ornament represents in many cases merely so much money, and neither the owner nor the maker, who is usually as much shroff or money-lender as craftsman, cares greatly about its form. Many of the forms, however, are beautiful, and few are entirely without interest. At Delhi a large variety is made, because the women of Rajputana, as well as those from the nearer districts, are now customers.

Mock jewelry.

Large quantities of sham jewelry made of brass, coloured glass, and plain glass with tinted foil behind it, are sold. These preserve the native forms of earrings, bracelets, and head ornaments, and are often very pretty. Year by year, however, a larger number of European imitations are imported; notably large brass beads in open work rudely counterfeiting filigrain. It is not always easy to say in such things where Germany or Birmingham ends and Delhi begins, for the stamped tinsel settings are combined with wire, silk and beads in the most ingenious way, till the completed ornament resembles those made in good materials of real native work. There is no affectation, however, about the ornaments cast in zinc for very poor people, where the workmanship, though following the forms of silver and gold, is rough and costless as the material. A considerable amount of taste is displayed in the stringing and arrangement of small coloured glass beads. From one shop the writer purchased 32 necklaces of different patterns, some in beads, others made of seeds and suitable for *faqirs*, &c., others of lac, coated with yellow foil with coins, also in lac, hanging to them, and others in wood. No two were alike, and the price asked for the 32 was two rupees. To a native purchaser it would have been less. Nowhere else can so much bravery be bought at so cheap a rate; and from the proverbs quoted by Dr. Fallon about Delhi dandyism, it would appear that cheap finery is a 'note' of the place.

Brass and copper-ware.

The coppersmiths are no less skilful than the workers in silver. In the Lahore and other copper bazars, visitors are invariably offered real Delhi ***degchis***; and most of the smiths from other places admit that they are not so skilful with the hammer and stake (***sandán***) as those at Delhi. In shaping a circular vessel of changing diameter they find it necessary to solder pieces on; while a good Delhi coppersmith shapes the whole without

Brass and copper ware.

joint from one piece Nests (*ganj*) of *degchis*, with cleanly defined edges fitting closely into each other, are the usual articles made, and they are often admirable specimens of plain hammer work. Brass articles are tastefully ornamented by the *chatera* with foliage in low relief. There is a considerable production too of small fantastic toys in brass, roughly made, but often ingenious. The native merry-go-round seen at *melás* furnishes one model, and railway trains, *raths*, grotesque figures and toy vessels of all sorts are also made. The best Hindu sacrificial brass wares come from Benares, Muttra and Brindaban, but many are now made at Delhi. Small boxes of brass with lids perforated in foliated patterns and furnished with a false lid in which a small mirror is fixed, are favourite possessions of native ladies, who use them to keep cardamoms or small articles of adornment. These are made in great numbers and find their way into Rajputana as well as all over the Punjab. The trade in brass small wares, however, is not likely to increase very largely, on account of the competition of German articles of a similar kind which are now imported in great numbers. The wholesale rates at which these are delivered to dealers are almost incredibly low. There is a special fabrication of things for this market, and the most important condition is that they shall cost the importer very little. When serviceable umbrellas are supplied at ten shillings a dozen, it may be imagined that stamped tin and brass boxes, pocket mirrors, beads, pocket knives, buttons, and other varietes of German small wares which are sold by pedlars sitting in the streets of all large towns and at all fairs and country side gatherings, are about the most minute and least costly objects known in modern trade. A great part of these things are in plain English mere rubbish, and the wonder is that they find purchasers at any price. The workmen of Delhi, it must be confessed, are themselves apt at this sort of trade, and it would occupy much space to enumerate the trivialities of local production exposed for sale in the Chándni Chauk.

Tin foil.

Punnah or tin foil is made here, and tinted sometimes with coloured varnish ; it serves as gold tinsel. A surface of wood covered with this material and then painted on in foliated patterns used to be a favourite form of decoration for doors, some of which are to be found in the fine old *havelis* in the older parts of the city. German orsidue, however, is made in so many forms, and imported at so cheap a rate, that this trade is scarcely likely to survive.

Mirrors, &c.

Imported plate and common glass are silvered in the old style with mercury and tin foil, and the edges are often bevelled and cut by the workmen with the aid of corundum powder. Many of these looking glasses are mounted in a gaudy style with borders of painted glass, and an arrangement by which they stand at an angle or fold flat. Glass bangles are said to be made. They are certainly sold in large quantities.

Lac bangles.

Lac bangles incrusted with spangles in stamped orsidue and with beads are made in large numbers. Some are coated with tin, ground and applied as a paint and then covered with a tinted varnish, a method of obtaining a metallic glimmer through colour which is characteristic of many Indian forms of decoration.

Ivory-carving.

Ivory-carving is practised by only one or two artisans. It is impossible to praise the camels, elephants, bullock *raths* and figures here made. They are not equal to the Murshedabad work. Combs, paper-knives and other small objects, often ornamented with the figure of a bird or perforated in geometric open work patterns, like those of Amritsar, are also made. But the art cannot be said to flourish.

Wood-carving.

Neither is wood carving a prosperous or popular business. There are some particularly fine examples of old doors and doorways in the city, but

Chapter IV, B.

Occupations, Industries and Commerce.

nothing of any importance is now produced. It has been demonstrated however by Col. Montgomery Hunter that, supposing a demand were to arise, there are carvers capable of rivalling the old work. That gentleman had the doors and carven wainscot of a large room prepared under his superintendence. The result was successful, but the completed work had more of stone than wood treatment.

Stone-carving.

Stone carving is not very extensively practised, but there are numerous examples of modern work which show a high average of excellence. The spandrels or *mihrábs* of doorways seem to be the favourite field for the stone-carver's art. The foliage, as in all modern work, is excessively suave and flowing in line, and somewhat tiny in detail; contrasting in this respect with the simpler and more rigid lines and scantier forms of the ornament of the best periods.

Plaster work.

In the open courts and larger rooms of the better class of native houses the pilasters and arcades are wrought in plaster work, which, though late in design, is pretty and tasteful in execution. The notable deterioration which has taken place of late years in the *ráj mistri's* craft is attributed by the workmen themselves to the introduction of the very different method of treating wall-surfaces necessary for our large English buildings, where immense stretches of wall have to be covered with plaster as economically as possible. A skilled workman will tell you that any cooly can learn to do such work; and as a matter of fact the greater part of the men employed by the Public Works Department are only promoted labourers, and very few of them are capable of working out such details as the pendentives of vaults or the foliated pilasters and *mihrábs* of the arcades which are universal in the work of fifty years ago. Even in English bungalows built at that period, the native fancy, though evidently ill at ease in our vast, rectangular domestic barns, broke out in quaint panelling on the walls and in ornamented mantel pieces. The barrack and the railway station, however, have now effectually checked this; and the *ráj mistri* has learnt how to combine the worst and least durable plaster work ever wrought in India, with pure, utilitarian hideousness.

Delhi porcelain.

Dehli pottery, as purchased and understood by Europeans, is a craft of recent origin. For many years large jars or *martabáns* for native domestic use, jars of a smaller size for the pickles and preserves which are specialities of Dehli, and small *dawáts* or inkstands, have been made in a rough sort of porcelain covered with a glaze. There was no specimen of the ware in the Punjab Exhibition of 1864, and no notice was taken of it by Europeans.

In 1869, the writer, passing through Delhi, purchased a number of these jars and took them to the London Exhibition of 1870, where their fine texture of glaze, a rough, duck-egg-like coating, was admired by connoisseurs, notably by the late Mr. Fortuny, a celebrated Spanish painter, then visiting England. (One of these articles by the way happened to be marked *martabán*, the native name for a jar, and was afterwards described on a museum label as coming from Martabán, a port on the Burmese coast.)

Since that time new forms have been suggested to the potters. These are mostly flower vases, *cháguls*, *surahis*, and similar decorative shapes of Indian or Persian character. As this application of pottery is entirely new to this part of India, there are no traditions to be interfered with. Lack of enterprise and ignorance of the possibilities of the art have prevented it from being largely developed. Little has been done to meet the demand, and nothing to anticipate or stimulate it. The workmen have been dragged into notice with apparent reluctance, and do not cordially accept

opportunities of making money. Bhola is the best known of the Delhi potters. Another member of the family was some years since attracted to Jeypore, and works in connection with the School of Art there, where pottery similar as to "paste" or body and glaze, but decorated with more skill, is produced.

Chapter IV, B.

Occupations, Industries and Commerce.

Delhi porcelain.

The ware, from the fact of the "paste" being an artificial one, *i.e.*, compounded of pounded stone and gum, and not a natural clay, has to be made in moulds, and cannot be freely handled and made in great variety of form on the wheel.

It is curious that so little has been done to improve the paste, as true China clay is found not far from Delhi, and is used habitually by the gold and silversmiths for their crucibles. Mr. Mallet of the Geological Survey writes : "Kaolin is obtained at Kusseempur near Delhi from a decomposed granite. The rock is elutriated, and the washed Kaolin made up into small cakes which are chiefly used for white-washing. The blue and white Delhi pottery is probably made from the same material." This surmise is a natural one, since China clay, similarly procured and prepared, is used in Europe and China for pottery. But the Delhi pottery, in slackly burnt samples, is almost pure sand, and can be rubbed into holes with the finger nail where the glaze does not hold it toeather. A mixture of the Kaolin with the pounded stone ought to result, if it were sufficiently fired, in a good porcelain. As it is in some of the best pieces, the "body" is semi-translucent. Blue and a pale-green are the colours used for decoration. The patterns are poor in design, and though the general air of the product is delicate and pretty, it has a somewhat sickly quality, happily described by a connoisseur as "anæmic" when compared with the fulness of colour and richness of pattern of Multán ware.

The potters of the latter place, it may be noted, are Muhammadans, and of very different social standing from the *kumbhar*. The Delhi potters are Hindus, and probably of the ordinary *kumbhar* or potter caste.

Earthen toys.

In unglazed earthen pottery, there is not much to note. At fair times Delhi produces, perhaps a larger variety than is seen elsewhere of those grotesque toys and figurines, which periodically call forth the invention of the potter and notably add to his income. Here, indeed, as the city is regarded as a place of pleasure, their sale goes on all the year round. It is at fair times that caricature portraits in burnt clay, rudely painted, are produced ; and stories are told of too sensitive civil officers making the potters' fortunes by buying up libellous representations of their features and figure. This toy trade, popular all over India, is the root from which the remarkable figure modelling of the North-West Provinces has grown.

Models of snakes.

A skilful toy-maker, Hera Singh, produces models of snakes in terra-cotta, which are carefully coloured from the plates in Sir Joseph Fayrer's *Thanatophidia* and other works, and sold to civil officers for use in *tahsíl* offices as a help towards the identification of snakes for the destruction of which rewards are offered by the Government. The models are beautifully made and coloured.

Basket-making.

Another recent trade, which seems likely to be popular in its humble way, is basket-making. Tiffin baskets, work and tea-tables, chairs and other articles, are now made in split bamboo with bands of coloured splints. The work is fairly neat and strong. The basket-makers call themselves Rájpúts ; but as this is the answer most Hindus of low degree give when asked to what caste they belong, it need not be taken very seriously. Cane is not used, and the Chinese basket-maker, who gets the best work of Calcutta and Bombay, does not compete with local labour.

Tin working.

Among new trades may also be mentioned the growing use of native-made tin ware. A great number of tin-lined packing cases are imported,

Chapter IV, B.

Occupations, Industries and Commerce.

Seal-engraving.

and here as elsewhere they are put to use. But the Delhi tinmen seem to be more skilful than those of other regions, and among other things their tin lanterns may be specially noted for unusual neatness of make.

Seal-engraving is an art which, owing probably to the unusual skill of two generations of engravers who worked in the Dariba, is considered to be a speciality of Delhi. All that can be done in Persian letter cutting on seals is done here, but there has never been in India any good intaglio cutting as it is understood in Europe. It is curious that races which excel in minute work should have so completely neglected this form of art.

Paper.

Paper of the usual fibrous and rough quality is made in the city, and finds ready sale, as it is good of its kind.

Embroidered shoes.

Connected with the gold and silver wire trade about to be noticed in detail, is the considerable trade in embroidered shoes for which Delhi has long been celebrated. The variety of patterns and shapes is remarkable, even in a country where phantasy runs riot. Nothing could be prettier or more dainty than some of the slippers, (*zenana juti*) made for native ladies' wear; embroidered with seed pearls usually false, with spangles and every variety of gold and silver thread; and inlaid with red, black or emerald green leather in decorative patterns. Gilded and silvered leather are also used. Sometimes gold and silver embroidery is worked on cloth over a basis of leather. Men's shoes are often no less elaborate. In 1864, according to Mr. B. H. Baden-Powell, Delhi exported shoes to the value of four lacs of rupees yearly. It is probable that the trade has greatly increased since that time; for the railway has opened new markets, and shapes unknown in the Punjab are now made, *e.g.* the Maratha shoe with a heavy, cleft, broad toe, much turned up. English forms are creeping into use. No sumptuary regulation to restrain extravagance in gilded shoes and enforce the use of plain black leather could be half so potent, as the unwritten ordinance which permits an Oriental to retain a pair of patent leather boots on stockinged feet, and requires him to doff shoes of native make when in presence of an English superior. In time perhaps the preference for European forms consequent on this ordinance may tell on the Delhi shoe trade; but hitherto it cannot fairly be said to have done it much harm.

Textile fabrics.

Turning to textile fabrics, in spite of the large importation of piece-goods from Europe, one of the visible signs of which is the busy piece-goods *bazár* off the Chándni Chauk, there is a considerable cotton weaving industry here, and *pagris* and *dopattas* of local make are largely exported. If hand-loom weaving is dying, which, taking India as a whole, would seem to be the case, it must be admitted it is dying hard in the Punjab. The fine muslins which were formerly woven for the wealthy still survive. In the portraits of Mughal nobles, as in illustrations of popular poetry, figures are constantly represented attired in muslin so transparent that the under garments show clearly through. The oft-repeated story of the Emperor who reproached his daughter for being imperfectly clad when she was swathed in many yards of fine muslin, is quoted as a proof of the skill with which Gossamer webs of cotton were produced. A market for these fine muslins has now to be sought in native states, and it is at Patiála and Nabha and in Rajputana that they are mainly disposed of. Compared with the bulk of the European importations of cotton goods, the local production, however, is but small. Some fancy dyeing, including the curious knot and stripe dyeing in which patterns are produced by tying up minute pockets of the cloth with fine thread in simple ornamental forms and then immersing in dyes of different colours, is done.

Chapter IV, B.

Occupations, Industries and Commerce.

The rapid development of the wheat trade has given a great impetus to the weaving of gunny bags—a trade which is entirely new and sternly utilitarian in character.

In popular estimation Delhi stands pre-eminent for its lighter and more decorative manufactures, such as jewelry and embroidery.

Gold and silver embroidery.

The embroidery in which gold and silver thread are used is commercially the most important. True *khimkháb*, like that of Benares and Ahmedábád in which gold and silver threads are loom-wrought, is not made, the closest approach to it in the whole of the Punjab being the gold and silk-weaving of Multán and Baháwalpur, and the gold and silk belt-weaving on a stout warp of Amritsar. According to Mr. Stogdon, C.S., who furnished some valuable and trustworthy notes on the gold and silver wire industries of Delhi to the Report of the Internal Trade of the Punjab, 1881-82, it is calculated that about 50,000 souls are employed here in this and its kindred trades, and that about 327,950 miles of silver and silver-gilt wire are annually produced. Much of this is used for covering silk thread with silver or gold, when it is called white or yellow *kalabatún*. The purity of the metals used, which in former times, especially at Lahore, was the subject of stringent regulation and surveillance both on the part of Governments and the guilds of wire-drawers, is now necessarily left to the exigencies of a trade in which cheapness is yearly growing a more essential condition. A sort of assay, however, is consequent on the demand of the Municipality for octroi duty. Mr. Stogdon thus describes this part of the business: "The Municipal Committee have established an octroi station in Delhi. To this station the *byopáris* bring their raw material to be melted down, and the amount of duty payable by them depends on the quality of the ingot they intend to turn out. The scale is as follows: Gold *kandala*, Re. 1-8 per ingot of 75 *tolas*; silver *kandala*, Re. 1-4 ditto; sham gold, 8 annas per ingot of 75 *tolas*; ditto silver, 4 annas; *kandala mel* (half silver half copper) 12 annas per ingot; silver wire, three pie per *tola*. The *byopárí* presents his silver and copper to be weighed, and on payment of the duty a receipt is granted to him. He then takes his metal into the station and melts it down in an earthern crucible, called *kathála*, in one of the numerous compartments set aside for the purpose. From the crucible he pours it into an iron mould called *reya*. The bar or ingot of silver and copper when thus melted down is called *gulli*. If it is intended to work gold leaf into it, it is about 8 inches long by 1¼ inches square. The *gulli* is then made over to the *kandala kash*."

It is scarcely worth while here to follow Mr. Stogdon or Mr. Baden-Powell, through a careful description of the processes by which this ingot is first gilded and subsequently drawn into wire. The chief difference between wire-drawing in England and India lies after all in the lack of machinery in the latter country. There is, however, wonderful delicacy of hand, and skill that can only be attained by long years of practice in some of the processes. The flattening of a row of slender wires with a hammer as they are drawn over a tiny steel anvil, into minute ribbons of equal width, is one of those feats of manual dexterity, the exceeding skilfulness of which a bystander can only realise by an attempt to imitate it. Similarly nothing can look easier than the covering of thread with these minute ribbons. The thread hangs from a hook in the ceiling and is wound on an iron spindle. The workman gives the spindle a quick twirling motion by passing it rapidly under the palm of his hand over a sort of greave that covers his thigh; while the thread is rapidly spinning, the gilt wire is applied. The workman's hand, accompanied by a glistening streak of gold, travels rapidly upwards with

Chapter IV, B.

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Occupations Industries and Commerce.

Gold and silver embroidery.

no apparent effort, but it leaves the thread perfectly covered with gold evenly coiled ; no silk showing and no uneven overlapping. The exceeding tenuity to which gilded silver can be drawn out and yet retain an unbroken surface of gold has been continually dwelt upon in all accounts of wire-drawing. It does not pay to draw out tinsel so fine. Silver unfortunately will bear the admixture of a considerable quantity of copper without losing colour to ordinary eyes; and Delhi *kalabatún* contains often more copper then the purchaser bargained for. The various qualities of gold thread are discriminated at a glance with perfect accuracy by experts. I have often failed to assort a series of skins according to their value—a task which is easy to any gold embroiderer. It is evident from a tradition mentioned in Mr. Griffiths' catalogue of Bombay contributions to the Calcutta International Exhibition, 1884, that the manufacture of gold thread is of some standing. Mr. Griffiths writes : " Ahmedábád and Surat workers state that their ancestors came from Chámpáner, and that the craft was originally carried on by Musalmáns at Dehli and Agra, under the patronage of the Mughal Government. A tradition is current that a goldsmith from Chámpáner went to Delhi and happened to see gold and silver thread, and wanted to learn the art, but could get no information. Feigning blindness he got himself employment as a cooly to hammer the bars of silver. There he learned the art of gilding and drawing wire to the required thinness. He afterwards opened a workshop in his native town, whence the process was carried to Ahmadábád, Paithan in the Nizam's territory, Surat, Yeola, Poona, and Bombay." This story is told, *mutatis mutandis*, of nearly every skilled handicraft in existence, but it seems to show that the art was unknown in the rich Hindu region of Guzerat.

The gold thread work of Gulburga further south was also Muhammadan. So it appears likely that the early Hindu civilization, concerning the splendours of which so much has been written, was innocent of golden tissues.

Embroidery on leather for shoes has been mentioned as one of the uses to which gilt thread is put. But this is only one of many uses. As gold thread is not easily worked on the needle, it is usually laid on the surface of the cloths to be ornamented and tacked down at intervals with a stitch of silk through the fabric. To do this conveniently so that one hand is free to pass the reel on which the gilt thread is wound, while the other stitches it down, a frame is necessary; hence gold embroidery is called *karchob*, frame work. But this name seems to be used to distinguish more particularly the large embossed work familiar in State elephant *jhools*, *masnads* and the like. The finest examples of this work must be sought for in native States and in European museums, and it is but seldom that large and important pieces are now wrought. In cases where the whole of the field is to be covered with gold work, a stout cotton cloth is stretched on the frame. On this the design is drawn by the *naqqásh*, and the parts to be raised are worked over with thick, soft cotton, dyed yellow, passed on the surface from a reel, and stitched down at each passing with ordinary sewing thread. The centre veins of leaves and other forms are marked with stitching, and a kind of modelled surface is thus produced in thick cotton thread. Over these forms the gold and silver thread is laid, their lines following sometimes those of the cotton underlay and sometimes going in opposite directions. For the grounds, varieties of basket-work and herring-bone stitches are adopted ; spangles and lines of twisted wire *sulma* are introduced to mark and relieve the leading lines of the pattern. Several men work at once on these fabrics, and they are not so long in execution as this description may seem to indicate. The sheen of the gold threads interlaced in different directions as they cross over raised surfaces,

Gold and silver embroidery.

produces a brilliant and in large pieces a splendid effect. In cases where coloured silk velvet is bordered with raised gold embroidery of this kind, the velvet is sewn on strong cotton cloth, and during the work the parts to be left plain are kept carefully covered up. In the same way caps, cushions, tea cosies and other trifles are wrought; but as relief is not always necessary as in large throne cloths, elephant housings and the like, the forms are not always embossed in cotton.

A pretty variety of gold embroidery which has become popular of late years is called *mina* work, because of a slight resemblance to *cloisonné* enamel. The outlines of foliage are done in gilt thread, but the leaves and flowers in brightly coloured silk. On a suitable ground this work is very charming. Table covers, panels for screens, mantel-piece borders and ornaments for brackets seem to be the favourite objects. It must be admitted that Bombay and Sindh run Delhi pretty close in *bharat kám* (filled in work), as they call *karchob*; but the largest Bombay-maker, Daudbhay in the Kalbadevi road, "employs a large number of workmen who are principally from Delhi." Since the world of fashion has decreed that gold and silver embroidery, for many years considered theatrical and pretentious, is only picturesque and beautiful, some excellent work has been produced for ladies' dresses. The shapes of these change so quickly in the western world, however, that the Delhi artizan has scarcely completed a skirt or a dress front when it is hopelessly out of fashion and useless.

Strange forms of byegone periods are still adhered to, such as the *burnous* opera-cloak and loosely-fitting jackets with open sleeves. Borders and trimmings it is being discovered are a safer field for the exercise of the art. A very dainty sort of embroidery is worked on net, and in this case the gold thread is not passed but run through. Gold sprays are also wrought on white muslin *jamdáni*, with an effect similar to that of the well known Lucknow work.

The variety of embroidered caps worked for the better classes of natives in real gold and silk, and for those of lower degree in tinsel, is beyond enumeration. Many shops are devoted exclusively to the sale of caps. Nautch-women's dresses are often triumphs of gaudy and gilded broidery. Weddings consume a large amount of finery, and on holidays and at fairs gilt lace, real or false, makes all the children gay.

A large quantity of gold and silver thread is used by the *nechaband* in the manufacture of *hooka* snakes and pipes. This is prettily variegated with coloured silk, and no small skill and neatness are displayed in their plaiting. The *patua* or *patoti* makers work up a great deal in stringing necklaces, head ornaments and bracelets together, the ties being usually in gilt thread. In the *parándas* or queue terminations for the three long tails of hair affected by native ladies, pretty combinations of gilt thread with brightly coloured silk are produced. The *paránda* is also frequently made in embossed silver. The tassels of the *azárband*, the universally worn *pyjama* string of silk, are frequently costly arrangements in *kalabatún*, which is also worked into a great variety of fringes for decorative purposes. Some of this is wrought on a tiny loom, the heddles of which are perforated cards that can be grasped and turned in one hand. One sort of fringe of flattened gilt wire is worked weft-wise in a mineature loom into a warp of silk, beyond which the loops of wire are carried and secured round an iron L-shaped hook attached to the weaver's waist. When the loop is full the wires are released and cut open. A loose fringe of glistening gold is thus bordered by a woven hem of silk. There is no end to the variety of braiding and edging made. The invariable practice seems to be to braid by hand, holding the card taut to an iron hook on a small standard fixed on a

Chapter IV, B.

Occupations, Industries and Commerce.

Gold and silver embroidery.

pedestal, which is very frequently the richly carved base of one of the enriched pillars common in the old buildings of Delhi.

Gold lace proper is not now, Mr. Stogdon writes, so much used as before the Mutiny. "At present Husain Bakhsh and his son Aziz Bakhsh are the only manufacturers in Delhi." The machine used is an exceedingly neat contrivance, an elaborate loom in miniature, the heddle strings converging to a sort of pedal board, like that of an organ on a minute scale. The great toe, which in the native foot is flexible and free in movement, picks out and depresses each heddle in turn with unerring precision. This quadrumanous facility of grasp is of the greatest use in silk-winding, braiding, and gilt cord-making, the great toe being constantly used to hold the work.

Silk embroidery.

Silk embroidery is of several kinds. A long loose stitch in white filoselle, worked in pine or other forms on grey, blue, and other colours of Cashmere (English), is one of the commonest. Shawls and articles of female attire are the usual forms, but it is not now fashionable. The woollen fabrics of Cashmere and Amritsar are also decorated with silk embroidery. This is frame work in all cases. Satin of European make is coming into increased use for silk embroidery, and some of the recent patterns, notably one counterfeiting the markings in peacocks' feathers, are brilliant and effective. As a rule, however, it can scarcely be said that this gay and attractive work is good or even tolerable art when judged by any serious standard. There seems to be a touch of flimsiness in most Delhi work, and this characteristic is not likely to be cured by the determination of the public on one hand to pay cheap prices and of the dealer on the other to secure large profits.

Tinsel printing.

Some cotton-printing is done of no remarkable quality. Silver tinsel-printing on Turkey red muslin, *salu*, is made in quantities for weddings, &c., but it is inferior to that of Kangra and Rohtak.

Delhi-painting.

The miniature painting of Delhi has grown from the practice of illuminating costly M.S. books, introduced from Persia, and greatly in favour at the Mughal court in its palmy days. The names of calligraphers of the 13th century still survive in Persia, though little remains that can be confidently attributed to them. During the 16th and 17th centuries the art, which from the manner of its growth and fostering, as well as from the costly splendour of its finest examples, has some right to be called a Royal one, flourished in India. The catholic spirit that led the great Akbar to have Sanscrit epics translated into Persian, inclined him to look favourably on the limner's art, though it is opposed to Muhammadan religious canons. Abul Fazl in the *Ain-i-Akbari* makes the monarch say :—" There are many that hate painting, but such men I dislike. It appears to me as if a painter had quite peculiar means of recognising God ; for in sketching anything that has life, and in devising its limbs one after the other, he must come to feel that he cannot bestow individuality upon his work, and is forced to think of God, the only giver of life, and will thus increase in knowledge."

The courtly author may be responsible for the form of this utterance, but there can be no doubt about the spirit in which the Emperor regarded the liberal arts. It is true that there are no representations of living figures in Muhammadan architecture, excepting in the altogether abnormal pottery decorations of the north front of Lahore Fort ; but it is clear that the portrait limner was encouraged in the practice of his art. There is scarcely an art collection in existence that does not include examples of Perso-Indian pictures. Mr. W. W. Hunter writes : " The Royal Library at Windsor contains the finest examples in this bye-path of art. A noble manuscript of the Sháh Jahán Nameh, purchased in Oudh for £1,200 in the last century, and now in possession of Her Majesty, will amply repay a visit." The

Delhi painting.

house of Firmin Didot of Paris, however, possessed perhaps the largest and most complete collection of "examples of this bye-path" which is in fact a broad highway, leading, as has been demonstrated in Europe, to the highest achievements of pictorial art. M. Ambroise, Firmin Didot, and M. P. Barty exhibited in the retrospective department of the Paris Exhibition of 1878, works which it would now be difficult to match in Persia or India. Recently several leaves of a superb Shah Námeh, each leaf a picture full of most elaborate and perfectly wrought detail, have been acquired for the South Kensington Museum by Mr. Purden Clarke. These pictures contain a complete exposition of the architectural forms of Samarcand and Persia. Many similar treasures are still in the possession of native Princes and others belong to wealthy families. The production of such work, notwithstanding its minuteness and finish, must have been immense ; for Albert de Mandelso records that Akbar was credited with the possession of 24,000 manuscripts richly bound. Many of these, as invariably in the case of the Kuran, were probably M.S. illuminated with ornaments merely in gold and colour. But many contained pictures, and one in the Lahore Museum marked as having belonged to Akbar seems to have been an exposition of the miracles in the Bible. In later times an English traveller speaks of the Delhi artists as excelling in licentious subjects, a line that is followed in secret to this day.

There is no record of the introduction of the practice of painting on ivory. This was probably modern, and imitated from the miniatures which with our grandfathers took the place of the photograph of to-day. It is known that an English miniaturist, one of the earliest members of the Royal Academy, and a contemporary of Sir Joshua Reynolds—Mr. Ozias Humfrey—spent some years in India, and it is not unlikely that his work was copied. This is only a surmise, but it is certain that the material used in the older work was invariably fine grey paper, like that known as Cashmere paper. The "manner" of the modern Delhi miniature, excepting when it is copied from a photograph, is identical with that of the old portfolio picture or the book illumination. Water colour alone is used, and the head is drawn full front (*do chashm*,) two-eyed, or in profile (*yek chashm*) one-eyed. There is, it need scarcely be remarked, no indigenous oil-painting of any kind throughout the country.

There are "Delhi painters" in Calcutta and Bombay, and a large amount of work is annually sold. Pictures of the chief public buildings of Northern India are used to embellish carved ebony caskets. Others of small size are set in gold and sold as jewelry. Books and frames filled with a series of portraits of the Mughal dynasties are favourite subjects. Akbar II in *durbar* is frequently repeated, with a British officer who keeps his cocked hat on in the royal presence. The beauties of the court are also drawn, and it is noticeable that the Persian artist (those of Delhi claim Persian descent) paints the light-coloured Persian complexion and ignores the dusky hues of India. An exception is made in favour of Ranjít Singh, who is always represented as very dark. Sketches are extant which show that in former times the Delhi artists sketched from nature, but by dint of repeating the same heads over and over again, the features naturally become conventionalized and exaggerated, so that peculiarities like Alamgir's long nose and Nur Mahal's round face are at once recognisable. In the same way in the early days of "*Punch*," before the multiplication of photographs put so many authentic studies from nature in the hands of the artist, familiar types were drawn and redrawn, until Lords Brougham, Derby, and Disraeli were indicated with a very few strokes. A characteristic of all Indian

Chapter IV, C.
—
Prices, Weights and Measures and Communications.

Delhi painting.

work is that the craftsman learns to do one thing, and then goes on doing it for the rest of his life. The Delhi draughtsmen many years ago learnt how to draw English gentlemen and ladies and English soldiers, and to-day when left to himself the *naqqásh* shows English people in the costume of sixty years ago. The lady, even in pictures of a railway station, wears a huge poke bonnet, large gigot sleeves, her waist is just under her arm, her skirts are short and tied sandals are on her feet. The British officer invariably wears a cocked hat and a high cravat, while the private soldier is crowned by the tall infantry shako with a large round knob atop ; a head dress, by the way, which copied from our troops, is still worn by the retinues of some native princes.

The introduction of photography is gradually bringing about a change in Delhi miniatures. The artists are ready to reproduce in colour any portrait that may be given to them ; and, although sometimes the hardness of definition and a certain inky quality of the shadows of some photographs are intensified, much of their work in this line is admirable. The stiffness which used to be their unfailing characteristic is disappearing ; landscape, a branch of art treated in indigenous art with stern conventionality, is attempted in a freer spirit, and it seems not unlikely that a new and perhaps more fresh and vital way of looking at nature may be adopted. Supposing this change to be desirable, a point that is not absolutely certain, the Delhi work of to-day is strongly marked by the faults of its qualities—the excessive delicacy and minuteness of handling, well expressed by their customary phrase, *ek bál qalm*, a brush of a single hair, the quality of the handling being far more esteemed than sound drawing, good colour, or truth of effect.

The ivory used for miniatures is prepared in the city, and the mounts, said to be of Aleppo glass, are also cut, rounded and polished here.

Course and nature of trade.

There are no statistics available for the general trade of the district, though the total value of the imports and exports of the Municipality of Delhi for the last few years and a brief notice of the trade of the city will be found in Chapter VI, and Table No. XXV gives particulars of the river traffic that passes through the district. The exports and imports of food-grains have already been noticed at page 121. The trade of the district as a whole practically coincides with that of the city, its great central emporium, and cannot usefully be brought under separate description.

SECTION C.—PRICES, WEIGHTS AND MEASURES, AND COMMUNICATIONS.

Prices, wages, rent-rates, interest.

Table No. XXVI gives the retail bazar prices of commodities for the last twenty years. The wages of labour are shown in Table No. XXVII, and rent rates in Table No. XXI ; but both sets of figures are probably of doubtful value. The Table at pages 139-40 shows the village prices for the last twenty years, as ascertained at the recent Settlement, together with the rates assumed for assessment purposes.

Chapter IV, C.

Prices, Weights and Measures and Communications.

Prices, wages, rent-rates, interest.

Statement of average prices in Delhi district.

	Crop.	First five years ending 1858-59.				Second five years ending 1863-64.				Third five years ending 1868-69.			
		Ballabgarh.	Delhi.	Sunipat.	Total.	Ballabgarh.	Delhi.	Sunipat.	Total.	Ballabgarh.	Delhi.	Sunipat.	Total.
		M. S. C.	M. S. C.	M. S. C.	M. S. C.	M. S. C.	M. S. C.	M. S. C.	M. S. C.	M. S. C.	M. S. C.	M. S. C.	M. S. C.
1	Cotton, uncleaned ...	......	0 19 12	0 15 10	0 17 11	......	0 13 3	0 11 8	0 12 6	......	0 8 14	0 9 1	0 8 15
2	Vegetables	......	......	......	......	......	......	......	......	......	......	......	......
3	Chillies	......	......	1 16 10	1 16 10	......	......	1 0 15	1 0 15	......	......	1 6 9	1 6 9
4	Melons	......	......	......	......	......	......	......	......	......	......	......	......
5	Methí	......	......	......	......	......	......	0 26 12	0 26 12	......	......	0 28 10	0 28 10
6	Ajwain, Dhania ...	......	......	......	......	......	......	......	......	......	......	......	......
7	Tobacco	......	......	0 13 14	0 13 14	......	......	0 15 0	0 15 0	......	......	0 13 0	0 13 0
8	Molasses (Gúr) ...	0 16 11	0 22 0	......	0 20 11	0 11 2	0 15 0	0 15 6	0 14 1	0 11 15	0 14 0	0 15 1	0 13 11
9	Onions	......	......	......	......	......	......	......	......	......	......	......	......
10	Safflower	......	0 3 0	......	0 3 0	......	0 2 8	......	0 2 8	......	0 3 0	......	0 3 0
11	Indigo	......	......	......	......	......	......	......	......	......	......	......	......
12	Wheat	0 37 2	0 38 11	1 1 9	0 39 2	0 26 12	0 25 7	0 27 15	0 26 11	0 24 1	0 21 3	0 24 2	0 23 2
13	Gram	1 3 5	1 13 2	1 9 11	1 12 1	0 34 7	0 34 0	0 33 14	0 30 12	0 30 4	0 26 10	0 30 3	0 29 0
14	Wheat and Gram ...	......	1 1 5	......	1 1 5	......	0 30 6	1 5 0	0 37 11	......	0 22 15	0 26 1	0 24 8
15	Wheat and Barley ...	......	1 2 11	......	1 2 11	......	0 31 13	......	0 31 13	......	0 25 14	......	0 25 14
16	Sarson	0 25 14	0 27 3	0 26 13	0 26 10	0 19 11	0 16 6	0 20 2	0 18 12	0 20 10	0 19 14	0 20 4	0 20 4
17	Rice (Dhan) ...	......	......	1 3 6	1 3 6	......	......	0 29 9	0 29 9	......	......	0 25 5	0 25 5
18	Jowár	1 7 2	1 10 13	1 19 7	1 12 7	0 38 10	0 32 13	0 30 4	0 33 14	0 33 3	0 29 2	0 30 12	0 31 0
19	Indian corn	1 9 12	1 15 2	1 6 12	1 10 9	1 1 13	0 32 14	0 36 13	0 37 3	0 32 11	0 30 15	0 34 10	0 32 12
20	Tarah	0 33 14	0 34 9	0 25 0	0 31 2	0 25 14	0 21 8	......	0 23 11	0 27 15	0 25 10	......	0 26 13
21	Barley	1 14 4	1 14 10	1 19 10	1 16 3	1 0 6	0 38 6	0 34 4	0 37 11	0 35 7	0 30 11	0 35 10	0 33 15
22	Barley and Gram ...	1 9 2	1 9 7	......	1 9 4	0 38 4	0 36 15	......	0 37 10	0 31 15	0 29 7	......	0 30 11
23	Bájra	1 4 13	1 8 6	1 5 6	1 6 3	0 37 3	0 34 3	0 27 15	0 33 2	0 30 5	0 27 15	0 26 15	0 28 6
24	Til	0 20 4	0 25 3	0 16 0	0 19 14	0 16 8	0 13 6	0 14 12	0 14 14	0 15 15	0 13 10	......	0 14 13
25	Mash	1 1 11	1 5 11	1 6 14	1 4 12	0 33 15	0 24 6	0 22 3	0 26 13	0 25 9	0 18 2	0 16 5	0 20 0
26	Masur	......	0 30 14	......	0 30 14	......	0 25 2	......	0 25 2	......	0 21 8	......	0 21 8
27	Hemp	......	0 20 0	0 21 0	0 20 8	......	0 14 8	......	0 14 8	......	0 11 2	0 17 8	0 14 5
28	Charí	......	......	......	......	......	......	......	......	......	......	......	......
29	Jowár	......	1 24 3	......	1 24 3	......	1 4 0	......	1 4 0	......	0 37 10	1 3 0	1 0 5
30	Lobia	......	1 19 10	......	1 19 10	......	1 1 13	......	1 1 13	......	0 29 13	......	0 29 13
31	Italian Millet (Kangna)	......	0 29 4	......	0 29 4	......	0 20 6	......	0 20 6	......	0 22 12	......	0 22 12
32	Moth	1 7 14	1 12 3	1 5 8	1 8 8	0 36 0	0 32 11	0 31 0	0 33 4	0 30 7	0 24 6	0 34 8	0 29 12
33	Arhar	......	1 0 10	......	1 0 10	......	0 28 1	......	0 28 1	......	0 23 14	......	0 22 14
34	Mung	1 7 5	1 10 12	1 15 5	1 11 2	0 30 7	0 24 13	0 22 4	0 25 13	0 27 9	0 19 12	0 25 2	0 24 2
35	Peas (Mater) ..	......	......	......	......	......	......	......	......	......	......	......	......
36	Mandwa	......	......	......	......	......	......	......	......	......	......	......	......

Chapter IV, C.

Prices, Weights and Measures and Communications.

Prices, wages, rent-rates, interest.

Statement of average prices in Delhi district.—(Continued.)

	Crop.	Fourth five years ending 1873-74.				Of 20 years.				Value assumed for assessment purposes.			
		Ballabgarh.	Delhi.	Sunipat.	Total.	Ballabgarh.	Delhi.	Sunipat.	Total.	Ballabgarh	Delhi.	Sunipat.	Total.
		M. S. C.	M. S. C.	M. S. S.	M. S. C.	M. S. C.	M. S. C.	M. S. C.	M. S. C.	M. S. C.	M. S. C.	M. S. C.	M. S. C.
1	Cotton, uncleaned ...	......	0 10 4	0 9 11	0 10 0	0 12 2	0 13 0	0 10 11	0 11 12	0 12 2	0 13 0	0 11 0	0 12 0
2	Vegetables ...	......	......	......	......	2 20 0	2 0 0	2 20 0	2 13 5	2 20 0	2 0 0	2 20 0	2 13 5
3	Chillies ...	......	......	1 8 13	1 8 13	0 32 0	1 0 0	1 8 9	1 0 3	0 32 0	1 0 0	1 9 0	1 0 5
4	Melons ...	......	......	......	......	3 0 0	3 0 0	2 20 0	2 33 5	3 0 0	3 0 0	3 0 0	3 0 3
5	Methi ...	......	......	0 26 8	0 26 8	......	......	0 27 2	0 27 2	......	......	0 27 0	0 27 0
6	Ajwain, Dhania ...	......	......	......	......	0 12 6	0 12 0	0 14 0	0 12 13	0 12 6	0 12 0	0 14 0	0 12 13
7	Tobacco ...	......	......	0 15 0	0 15 0	0 29 1	0 32 0	0 14 4	0 14 4	0 29 1	0 32 0	0 15 0	0 15 0
8	Molasses (Gúr) ...	0 8 7	0 13 0	0 14 8	0 12 0	0 12 3	0 16 0	0 16 15	0 1 1	0 12 3	0 16 0	0 17 0	0 15 1
9	Onions ...	......	......	......	......	4 0 0	4 0 0	4 0 0	4 0 0	4 0 0	4 0 0	4 0 0	4 0 0
10	Safflower ...	......	0 2 14	......	0 2 14	0 3 12	0 2 14	0 2 12	0 3 2	0 3 12	0 2 14	0 3 0	0 3 3
11	Indigo ...	......	......	......	......	......	......	0 16 0	0 16 0	......	......	0 16 0	0 16 0
12	Wheat ...	0 18 14	0 20 9	0 22 4	1 20 9	0 26 11	0 26 8	0 28 13	0 27 5	0 27 0	0 27 0	0 29 0	0 27 11
13	Gram ...	0 18 10	0 24 2	0 23 4	0 22 0	0 31 10	0 34 7	0 36 12	0 34 4	0 32 0	0 34 0	0 37 0	0 34 5
14	Wheat and Gram ...	......	0 25 4	0 33 11	0 29 8	0 29 3	0 30 0	0 31 5	0 30 3	0 29 0	0 30 0	0 31 0	0 30 0
15	Wheat and Barley ...	......	0 27 8	......	0 27 8	0 33 2	0 32 0	......	0 32 9	0 33 0	0 32 0	0 33 0	0 32 11
16	Sarson ...	0 12 14	0 14 7	0 15 15	0 14 9	0 19 12	0 19 8	0 20 9	0 19 15	0 20 0	0 20 0	0 21 0	0 20 5
17	Rice (Dhan) ...	......	......	0 27 6	0 27 6	0 39 9	1 0 0	0 30 10	0 36 12	1 0 0	1 0 0	0 31 0	0 37 0
18	Jowár ...	0 27 3	0 29 4	0 25* 4	0 27 4	0 36 9	0 35 8	0 34 9	0 35 9	0 37 0	0 36 0	0 35 0	0 36 0
19	Indian corn ...	0 27 4	0 29 4	0 26 14	0 27 13	0 37 14	0 37 1	0 35 2	0 36 11	0 38 0	0 37 0	0 35 0	0 36 11
20	Tarah ...	0 15 13	0 19 18	0 24 5	0 19 14	0 25 10	0 25 5	0 24 8	0 25 2	0 26 0	0 25 0	0 25 0	0 25 5
21	Barley ...	0 28 4	0 31 8	0 27 15	0 29 4	0 39 9	0 38 13	0 38 1	0 38 13	1 0 0	0 39 0	0 38 0	0 39 0
22	Barley and Gram ...	0 24 3	0 30 14	......	0 27 9	0 35 14	0 36 11	0 37 0	0 36 8	0 36 0	0 37 0	0 37 0	0 36 11
23	Bájra ...	0 24 4	0 29 10	0 23 13	0 25 14	0 34 2	0 35 1	0 29 7	0 22 14	0 34 0	0 35 0	0 30 0	0 33 0
24	Til ...	0 11 4	0 10 6	0 15 8	0 12 6	0 16 0	0 15 3	0 15 5	0 15 8	0 16 0	0 15 0	0 15 0	0 15 5
25	Mash ...	0 19 13	0 21 1	0 18 9	0 19 13	0 30 4	0 27 5	0 27 5	0 28 5	0 30 0	0 27 0	0 27 0	0 23 0
26	Masur ...	......	0 19 11	......	0 19 11	0 39 9	0 24 2	0 30 0	0 31 4	1 0 0	0 24 0	0 30 0	0 31 5
27	Hemp ...	......	0 10 12	......	0 10 12	0 16 0	0 14 2	0 19 13	0 16 10	0 16 0	0 14 0	0 20 0	0 16 11
28	Charí ...	......	......	......	......	5 0 13	5 0 0	......	5 0 7	5 0 13	5 0 0	......	5 0 0
29	Jowár ...	......	1 1 2	0 39 6	1 0 4	1 8 0	1 6 12	1 0 0	1 4 15	1 8 0	1 7 0	1 0 0	1 5 7
30	Lobia ...	......	0 32 15	......	0 32 15	0 31 7	1 1 1	......	0 36 4	0 31 0	1 1 0	0 30 0	0 34 0
31	Italian Millet (Kangna) ..	......	0 20 9	......	0 20 9	......	0 23 4	0 30 0	0 26 10	......	0 23 0	0 30 0	0 26 0
32	Moth ...	0 22 8	0 26 0	0 24 12	0 27 12	0 34 3	0 33 13	0 32 6	0 33 17	0 34 0	0 34 0	0 32 0	0 33 8
33	Arhar ...	......	0 24 8	......	0 24 8	0 31 7	0 29 0	......	0 30 3	0 31 0	0 29 0	......	0 30 5
34	Mung ...	0 20 7	0 24 11	0 23 5	0 22 13	0 31 7	0 30 0	0 29 10	0 30 6	0 31 0	0 30 0	0 30 0	0 30 0
35	Peas (Matar) ...	......	......	......	......	0 39 9	1 0 0	1 0 0	0 39 14	1 0 0	1 0 0	1 0 0	1 0 5
36	Mandwa ...	......	......	......	......	......	......	0 38 0	0 38 0	......	......	0 38 0	0 38 0

Chapter IV, C.

Prices, Weights and Measures and Communications.

Prices, wages, rent-rates, interest.

The figures of Table No. XXXII give the average values of land in rupees per acre shown in the margin for sale and mortgage; but the quality of land and varies so enormously, and the value returned is so often fictitious, that but little reliance can be placed upon the figures. The Table on page 142 shows the transactions in land for the last 14 years, as ascertained at the recent Settlement.

Period.	Sale.	Mortgage.
1868-69 to 1873-74 ...	21-12	24-14
1874-75 to 1877-78 ...	48.6	29.4
1878-79 to 1881-82 ...	56-2	44-9

Weights and Measures.

The weights used for ordinary purposes are according to the standard scale of *maunds*, *sérs* and *chattaks*. Jewelry is weighed by the further common subdivisions *cháwal, ratti, masha, tola*. As a measure of length the English yard of 36 inches is commonly used in the district. The natives have divided it into 16 parts called *girahs*, on the analogy of sixteen *chittaks* to the *sér*. There is another standard measure of length called the *imartigay*, 33 inches long. It is in general use for measuring houses.

Communications.

The figures in the margin show the communications of the district as returned in quinquennial Table I of the Administration Report for 1878-79, while Table XLVI shows the distances from place to place as authoritatively fixed for the purpose of calculating travelling allowance. Table No. XIX shows the area taken up by Government for communications in the district. Delhi is unusually well provided with means of communication. There is a metalled road running throughout the whole length north and south, another metalled road running nearly due west from Delhi towards Rohtak, and the Rájputána Railway nearly bisects the country between this and the Mathra road to Ballabgarh. The Agra canal also brings up stone and takes down grain again to a small extent. All these lines converge on Delhi, and form a radiating system of communications on the north, north-west, west, south-west, and south, which leaves little to be desired.

Communications.	Miles.
Navigable rivers ...	72
Railways	12
Metalled roads ...	116
Unmetalled roads ...	293

Rivers.

The Jamná forms the eastern boundary of the Delhi district throughout, and is navigable for the whole of its course, but not much used. It separates Delhi district from the Mirath and Bulandshahr districts of the North-Western Provinces, forming thus a natural division between the two provinces. With the exception of the Jamná, there is no other important river in the district. The principal traffic on this river as stated in the Punjab Famine Report, 1879, is shown in Table No. XXV. There is but little navigation on it; there is a small wood depôt at Garhi Mehndipur, below Mamiarpur, and corn is sometimes brought down the river from Bigah, a large village in the north of Delhi, to Sunipat; but there is little else worth speaking of in the way of river-trade. The mooring places and ferries and distances between them are shown at the top of page 143, following the downward course of the stream.

Chapter IV, C.

Prices, Weights and Measures and Communications.

Prices, wages, rent-rates, interest.

Statement of transfers by private sale and mortgage of land during 14 years.

	Name of Tahsil.	From 1861 to 1867.						From 1868 to 1874.						Total from 1861 to 1874.						Percentage of area alienated	
		Number of transactions.	Area in acres.	Jama.	Amount paid.	Average per acre.	Average per rupee of jama.	Number of transactions.	Area in acres.	Jama.	Amount paid	Average per acre	Average per rupee of jama.	Number of transactions.	Area in acres.	Jama.	Amount paid.	Average per acre.	Average per rupee of jama.	On total.	On cultivated area.
Sale.	Delhi ..	89	6,338	9,785	81,970	12 14 11	8 6 0	97	3,405	4,561	1,11,442	32 11 8	24 6 11	186	9,743	14,346	1,93,412	19 13 7	13 7 9	3 6	5 9
	Ballabgarh ...	53	2,519	2,137	16,851	6 11 0	7 14 0	73	1,426	2,126	37,783	26 8 0	17 12 0	129	3,945	4,263	54,634	13 4 0	12 13 0	6·1	5 2
	Sunipat ..	83	3,181	3,939	26,406	8 5 0	6 11 0	70	368	760	27,107	73 11 0	35 11 0	153	3,549	4,699	53,513	15 1 0	11 6 0	4·4	9.7
	Total ...	225	12,038	15,861	1,25,227	10 6 0	7 14 0	243	5,199	7,447	1,76 332	30 1 0	23 11 0	468	17,237	23,308	3,01,559	17 8 0	12 15 0	2·11	3·32
Mortgage	Delhi ...	106	5,389	7,406	48,934	9 1 3	6 9 9	211	5,628	7,880	1,20,865	21 7 8	15 5 5	317	11,016	15,286	1,69,799	15 6 7	11 1 9	4.1	6 7
	Ballabgarh ...	101	3,992	3,029	19,270	4 13 0	6 6 6	175	3,400	3,712	79,909	23 8 0	21 8 0	276	7,392	6,741	99,179	13 7 0	14 11 0	0·3	7·4
	Sunipat ...	149	1,562	3,143	37,466	240 0 0	11 15 0	317	1,805	4,001	1,14,595	63 9 9	28 10 0	466	3,366	7,144	1,52,061	45 3 0	21 5 0	3·2	8·3
	Total ..	356	10,943	13,578	10,570	9 10 0	67 12 6	703	10,831	15,593	3,15,369	29 1 10	20 3 7	1,039	21,773	29,171	4,21,039	19 5 5	14 6 11	2·67	4·19

Stations.		Distance in miles.	Remarks.
Maniárpur Bághpat		11	Ferry.*
Dahísrá	...	6	Ferry.
Burárí	...	6½	Ferry.
Wazírábád	...	4	Ferry.
Okhla	...	11½	Ferry.
Jaitpur	...	5	Ferry.
Kiráoli	...	4½	Ferry
Mahábatpur	..	2	Ferry.
Kabulpur Khádar	..	4½	Ferry.
Majháóli	...	3¼	Ferry.
Shájahánpur	...	5½	Ferry.
Chhánsa	...	3	Ferry.

* And bridge of boats which is broken up in the rainy season.

Besides the ferries and bridges of boats mentioned in the margin, there is a Railway bridge at Delhi, with a road underneath for passengers and vehicles.

Ferry income.

The income of five years for the different ferries is given below:—

No.	Ferries.		1875-76.	1876-77.	1877-78.	1878-79.	1879-80.	Average.
1	Maniárpur	...	3,700	3,600	3,325	3,100	2,910	3,327
2	Dahísrá ...	...	825	665	700	682	755	725
3	Burári ...	...	205	210	80	180	130	161
4	Wazírábád...	...	280	170	160	90	160	172
5	Okhla ...	...	315	170	260	285	275	261
6	Jaitpur ...	...	465	215	470	325	205	336
7	Kiráoli ...	..	350	160	250	220	135	223
8	Mahábatpur	...	500	525	550	510	245	466
9	Kabúlpur Khádar	...	720	600	520	570	275	537
10	Majháolí ...	...	360	470	495	365	225	383
11	Sháhjahánpur	...	200	245	355	550	200	310
12	Chhánsa ...	...	9,410	2,600	2,400	1,595	1,000	3,401
	Total	...	17,330	9,630	9,565	8,472	6,515	10,302

These ferries are almost always leased by auction, the contractors taking toll on passengers and traffic at rates the chief of which are the following:—

1.—Each person	...	...	...	3 pies.
2.— „ laden pony or donkey		...	...	9 „
3.— „ pony or donkey, not laden		...	...	6 „
4.—Two-ox waggon	...	...	...	4 annas.
5.—Laden bullock or buffalo		...	...	1 anna.
6.—Bullock or buffalo, not laden		...	...	6 pies.
7.—Camel, laden	...	...	...	4 annas.
8.— „ unladen	...	...	...	6 pies.
9.—Riding horse	...	...	...	1 anna.
10.—*Pálki* with 4 Kahárs	...	...	...	12 annas.
11.—Sheep and goats	...	...	...	1 pie.
12.—For opening a bridge to let a vessel pass			...	8 annas.
13.—Ekka, or *bahli*	...	...	...	4 „

Canal navigation.

The Western Jamná Canal is not at present navigable, though the scheme for its realignment will, among other alterations, make it so. Yet the Canal Department has done a good deal lately in the way of bringing up materials for the new bridges and canal bungalows, and taking down to the Delhi market the timber cut on the banks of the old line. The Agra Canal is navigable, and boats ply regularly up and down it; but from the official report of the Executive Engineer in charge it appears unlikely that the income from navigation tolls will ever be equal to the interest of the additional capital required to make the canal navigable.

Railways.

Delhi is exceedingly well provided with railway communications, no less than three railways coming into the town itself, the East Indian Railway, Sindh, Punjab and Delhi Railway, and the

Chapter IV, C.

Prices, Weights and Measures and Communications.

Railways.

Rajputana State Railway, all using the station belonging to the East Indian Railway. The two former are of the broad or five feet six gauge, and the latter the narrow or metre gauge. The two former cross the river at Dehli which is their terminus, whence the Rajputana State Railway traverses the district in the direction of Gurgáon for about twelve miles, with one station at Pálam, about ten miles from Dehli.

Roads.

The main lines of road are up and down the Grand Trunk Road, the Agra road, the Gurgáon road (for Rewárí and Fírozpur Jhirka), and the Rohtak road for the due west parts. A cross-road line of importance comes into Sunipat *tahsíl* from Kharkhaudah in Rohtak going eastward to Bághpat, and there is some little traffic along the Chhánsah and Kabúlpur Bángar line in the south. It would be good to have a public thoroughfare along the banks of the canal. Some of the heaviest traffic of the country lies in the cotton, *gur*, and grain carts of the canal villages of Sunipat. The cross-country lines of road in that part of the *tahsíl* are often soft and rutty, very often cut up by wrong-headed water-courses that seem to think the more turns they can take the better, and being on a high level compared with the long-used hollowed-out lanes, frequently flood them more copiously than the fields intended for irrigation. If on the new line of the canal a good *kacha* road were laid down on one side, and if country traffic were not merely winked at but encouraged and developed, it would prove a real and great benefit. A very full list of the roads will be found in Appendix IX to Mr. Maconachie's Settlement Report. The table at the top of next page shows the principal roads in the district stage by stage, with the conveniences for travellers to be found at each stage.

Beides the metalled roads, there are several important unmetalled roads in the Dehli district:—

Dehli towards Gurgáon *viâ* Baraich	11	miles.
Sarai Rahillah Khán to Najafgarh	12	"
Basant to Najafgarh	9	"
Nangloi Ját to Najafgarh	7	"
Azádpur to Bághpat	16	"
Between Gurgáon and Bahádurgarh *viâ* Najafgarh ...	10	"
Najafgarh to Dahísrah	24	"
Nangloi Ját to Alipur	10	"
Sunipat to Maniárpur ferry	11	"
Kharkaudah *viâ* Thána Kalán to Bághpat	18	"
Sunipat to Bághpat	12	"
Bádli to Zafarpur *viâ* Sunipat	29	"

the old imperial road but not now kept up. There are also others of less importance.

Besides the police rest-houses mentioned above, there is one at Najafgarh. The dák bungalows are completely furnished and provided with servants. The police bungalows are furnished, but have no servants.

Post offices.

There are two lines of horse dák running from Dehli to Karnál and Rohtak. They are run by a contractor, Moti Ram, who is subsidized by Government. A railway, however, has recently been opened from Rewári to Hissár, and this passes within about 20 miles of Rohtak, whence, for the future, the mails will be delivered in Rohtak.

Chapter IV, C.

Prices, Weights and Measures and Communications.

Roads.

Route.	Halting place.	Length of Stage.	Total length with District.	Remarks.
Dehli to Karnál.	Alipur ...	11	39	Police bungalow and encamping ground.
	Rai ...	10		Police bungalow and encamping ground.
	Larsauli ...	11		Police bungalow and encamping ground.
	Panchi Gújarán ...	3		Police bungalow.
	Garhi Kalán ...	2		Police bungalow.
Rai to Sunipat.	Sunipat ...	7	7	Police bungalow.
Delhi to Gurgáon.	Mahrauli ...	11	14	Dak bungalow and encamping ground, also police bungalow at Adam Khán's tomb.
Dehli to Mathra.	Chaukhandí ...	3	27	Encamping ground.
	Taláb Kishen Das...	2		Encamping ground.
	Badarpur ...	6		Police bungalow and encamping ground.
	Farídábád ...	5½		Police bungalow and encamping ground.
	Ajraundah ...	2		Encamping ground.
	Ballabgarh ...	4		Police bungalow and encamping ground.
Dehli to Rohtak.	Nangloi Ját ...	11	17	Police bungalow and encamping ground.
	Mundhkah ...	3		Encamping ground.
	Tikrí Kalan ...	3		Encamping ground.

Post offices.

There are Imperial Post Offices at Dehli (including one central and five sub-offices), Mahrauli, Arab Sarai, Ballabgarh, Chhánsah, Farídábád, Alipur, Larsauli, Nangloi, Najafgarh, Rai, Sunipat, Pahárganj, Subzimandi; Manjháolí and Badarpur. At all of these, with the exception of Badarpur, money-orders are issued, and Savings Banks established. Indian Postal Notes for small sums can also be obtained at all with the above-mentioned exception. There are no District Offices, but the District Funds pay a yearly subscription to the Imperial Post Office.

Telegraphs.

There is a line of telegraph running along the railway from Dehli to Gurgáon, with stations at "Military Siding" and Pálam. Also one along the East Indian Railway to the North-West Provinces and westward.

CHAPTER V.

ADMINISTRATION AND FINANCE.

SECTION A.—GENERAL AND MILITARY.

Chapter V, A.

General and Military.
Executive and Judicial.

The Dehli district forms one of the districts under the control of the Commissioner of Dehli. The ordinary head-quarters staff of the district consists of a Deputy Commissioner, a Judicial Assistant Commissioner, one Assistant Commissioner, two Extra-Assistant Commissioners, Judge of the Small Cause Court, District Superintendent of Police, two Assistant District Superintendents of Police, and the Civil Surgeon. One of the Extra-Assistant Commissioners is generally a European in charge of the Treasury, and one of the Assistant District Superintendents of Police is specially in charge of the City Police for which he receives an additional allowance.

Tahsíl.	Kanungos and Náibs.	Girdawars.	Patwaris.
Dehli ...	2	3	81
Sunipat ...	2	3	82
Ballabgarh ...	2	2	61

There are three *tahsíls*, Sunipat, Dehli and Ballabgarh, all connected by metalled roads, and each in charge of a *tahsíldár*, who is assisted by a *náib tahsíldár*. The village revenue staff is shown in the margin.

There are two Munsiffs in the district, one having jurisdiction within the Ballabgarh *tahsíl*, and one having jurisdiction within the Sunipat *tahsíl*, and 20 villages of the Dehli *tahsíl*. There is no Munsiff's Court at the Sadr, the Small Cause Court taking its place.

The statistics of civil and revenue litigation for the last five years are given in Table No. XXXIX.

Criminal, Police and Gaols.

The executive staff of the district is supplemented by two benches of Honorary Magistrates, one at Dehli, and the second at Sunipat.

The Police Force is controlled by a District Superintendent and two Assistants, one of whom is in special charge of the city of Dehli. The strength of the force, as given in Table I of 1881-1882, is shewn in the margin. In addition to these, 908 village watchmen are employed, giving an average of 1·12 men per village (see Chapter III, page 90); the largest number is found in Narela and Mahrauli, which have 11 *chaukidárs* each; the most prevalent castes among these are Shaikhs, Fakirs Bráhmins, Sweepers

Class of Police.	Total strength	Distribution.	
		Standing guard.	Protection and detection.
District (Imperial) ...	517	100	417
Cantonment	11	...	11
Municipal	591	...	591
Canal	22	22	...
Total	1,141	122	1,019

Patháns, and Gújars. The average pay varies in different *tahsíls*. In Ballabgarh it is Rs. 26-10-6, in Dehli Rs. 34-7-6, in Sunipat Rs. 34-4-2. The *thánas*, or principal police jurisdictions, and the *chaukis* or police outposts, are distributed as follows:—

Tahsíl.	Thana.	Outpost.
Dehli Within Municipal limits	Kotwálí. Hauz Kází. Dehli Gate. Kashmíri Gate. Pahár Ganj. Sabzimandí. Alipur. Nangloi-Ját. Najafgarh.	Sadr Bázár. Mahaldar Khán. Makbara Paik in Bádli. Nagli. Singhola. Nathupur. Alipur. Sarhi Síta Rám. Garhi Píran. Mundka. Tikri. Tihar. Nizám-ud-dín. Makbara Safdar Jang.
Sunipat ...	Rai. Larsauli. Sunipat.	Kimáspur. Bahalgarh. Rai. Murthal. Garhí Kalán. Bari. Larsaulí.
Ballabgarh ...	Mahraulí. Farídábád. Ballabgarh. Badarpur. Bassant. Majhauli. Chhainsah.	Fattehpur Asaula. Talab Kishandás. Pulpurhya. Pali. Dhauj. Sikri. Barh.

There are cattle-pounds at the following *thánas*: Alipur, Nangloi, Najafgarh, Rai, Larsauli, Sunipat, Mahrauli, Farídábád and Ballabgarh. There are also cattle-pounds at Chhansah and Badarpur, where there are no *thánas*. There are canal cattle-pounds at the following places: Sardhána, Júán, Jaunti, Chota Thána, Gangatoli, and Sarai Rahulla Khán.

The district lies within the Ambála police circle, under the control of the Deputy Inspector-General of Police at Ambála.

Year.	Total Jail population.	Daily average.	Total number of civil prisoners for the year.
1875 ...	1,217	382	84
1876 ...	1,119	336	106
1877 ...	1,730	352	38
1878 ...	2,015	417	50
1879 ...	1,376	346	56
Average ...	1,491	367	67

The District Jail is an old building, formerly a *sarai*, several hundred yards outside the Delhi Gate on the Badarpur road; the number of prisoners is shown in the margin, and averages about 367 criminal and 67 civil prisoners.

Chapter V, A.

General and Military.

Criminal tribes.

Table XL gives statistics of criminal trials, Table XLI of police enquiries, and Table XLII of convicts in gaol for the last five years.

In this district there are no tribes proclaimed under the Criminal Tribes' Act. Among the following castes, criminals are most numerous :—

Gújars.	Ránghars.
Gaurwahs.	Tagus.
Khaláits.	Mewátis.
Kanjars and Sánsis	Gandhílas.
Dhánaks.	Bilóches.

Gújars, Khaláits, Gaurwahs and Dhánaks give the most trouble Gújars commit cattle thefts and highway robbery. Khaláits chiefly confine themselves to shop-lifting, and obtain a livelihood by attending the numerous fairs which are held in Delhi City and neighbourhood, and stealing anything that they can lay hands on. They also wander about in gangs in the district, and pilfer from villages. They are not located in this district, but come from Gurgáon and neighbouring districts. Tagus also come from outside. They have no settled home in this district. They also attend fairs. Kanjars and Sánsis have no fixed habitation. They live in *chapars* in the jungle, and frequent fairs and the public roads and commit thefts of small things from bathers and travellers. Among this class, the women are as criminal as the men. The Gaurwahs reside in the Ballabgarh *tahsíl*. They are notorious cattle-lifters, and work in conjunction with the cattle-thieves of the Mirath and Bulandshahr districts in the North-Western Provinces, disposing of cattle stolen in these districts, and passing over to them for disposal, cattle stolen in the Delhi district. The Dhánaks of Rohat in the Sunipat *tahsíl* are notorious thieves and housebreakers, and numerous complaints are made concerning them by the *lambardárs* of the surrounding villages.

Revenue, taxation, and registration.

The gross revenue collections of the district, for the last 14 years, so far as they are made by the Financial Commissioner, are shown in Table No. XXVIII ; while Tables Nos. XXIX, XXXV, XXXIV, and XXXIII give further details for land revenue, excise, licence tax and stamps respectively. Table No. XXXIIIA shows the number and situation of registration offices. The central distilleries for the manufacture of country-liquor are situated at Dehli, Sunipat, and Ballabgarh. The cultivation of the poppy is forbidden in this district. Table No. XXXVI gives the income and expenditure from District Funds, which are controlled by a committee consisting of 28 non-official members selected by the Deputy Commissioner from among the leading men of the district, presided over by the Deputy Commissioner, together with the following official members—the Judicial Assistant Commissioner, the Assistant Commissioner, the Extra-Assistant Commissioner, the *tahsíldárs* of the three *tahsíls*, the Civil Surgeon, the Executive Engineer of the division, and the Inspector of Schools of the district. Table No. XLV gives statistics for Municipal taxation, while the Municipalities themselves are noticed in Chapter VI. The income from Provincial properties for the last five years is shown on the next page. The figures for the three latter years include the income of the Nazúl properties of Dehli, Ballabgarh and Farídábád. There is no record of the income

derived from that in Dehli for the years 1877-78 and 1878-79; from that in the other two towns the income derived was Rs. 632 in 1877-78 and Rs. 400 in 1878-79. The ferries, bungalows and encamping grounds have already been noticed in Chapter IV, page 143, and the cattle-pounds in Chapter V, page 147.

Chapter V, A.

General and Military.

Revenue, taxation, and registration.

Source of Income.	1877-78.	1878-79	1879-80.	1880-81.	1881-82.
* Ferries with Boat-Bridges	6.149	5.455	4,053	4,121	3.623
* Ferries without „	3,840	3,628	2,327	3,125	3,165
Staging Bungalows	2,544	2,588	2,846	3,055	3,637
Cattle Pounds (including fines on stray cattle)	1,980	1,331	1,713	2,041	2.654
Encamping grounds	2,041	1,785	1,641	1,654	1,665
Nazúl Buildings (under District Officer) ...	3,356	3,187	2,865	2,994	2,347
„ „ held in trust by Municipalities	...	...	12,898	12,671	14,628
Total	19,910	17,974	28,333	29,664	31,719

* For details see Chapter IV.

Government *taiyúl* property.

The *nazul* property mostly fell into the hands of the Government after the Mutiny, and consists in many instances of objects of antiquarian rather than of utilitarian value, such as Humáyun's Tomb, Safdar Jang's Tomb, the pillar generally known as the Kutab Minár, Mauza Kandrat (the ruins of one of the former cities of Dehli). Besides these there are other objects of public interest, such as the Purána Kila on the road from Dehli to Ballabgarh, the Kudsiah gardens, the Roshanára gardens, the two forts at Ballabgarh and Farídábád, the Dehli city Kotwáli, the police lines situated outside the Ajmir gate. A good many building sites in Dehli have fallen into the hands of Government, but in most cases those have been only of small value, and have generally been sold. In some cases they have been handed over to the Municipality of Dehli where they are within the jurisdiction of that body. Besides this Government is either sole or part proprietor of 99 villages comprising 31,381 acres with an estimated revenue of Rs. 25,540. It consists mostly of land confiscated at the Mutiny from the properties of the Rája of Ballabgarh, and the Nawáb of Jhajjar. They are fully described in the next section of this Chapter. Figures for other Government estates are given in Table No. XVII, and they and their proceeds are noticed in the succeeding section of this chapter, in which the land revenue administration of the district is treated of.

Statistics of land revenue.

Source of Revenue.	1880-81.	1881-82.
	Rs.	Rs.
Surplus warrant (*talabánah*)	779	715
Málikána or proprietary dues	1,716	2,025
Revenue fines and forfeitures	8	...
Other items of miscellaneous land revenue ...	412	640

Table No. XXIX gives figures for the principal items and the totals of land revenue collections since 1868-69. The remaining items for 1880-81 and 1881-82 are shown in the margin.

Chapter V, A.

General and Military.

Table No. XXXI gives details of balances, remissions, and agricultural advances for the last fourteen years; Table No. XXX shows the amount of assigned land revenue; while Table No. XIV gives the areas upon which the present land revenue of the district is assessed. Further details as to the basis, incidence, and working of the current Settlement will be found in the next section of this Chapter.

Education.

Table No. XXXVII gives figures for the Government and aided high, middle and primary schools of the district. The high school is at Dehli, and consists of two parts, English and Vernacular. There are middle schools for boys at Najafgarh, Arab Serai, Palam, Mahrauli, Ballabgarh, Farídábád and Sunipat.

There are primary schools for boys in the following places in the, Dehli *tahsíl*: Arab Serai, Palam, Najafgarh, Purána Kila, Aliganj Serai Rahulla Khán, Madipur, Nangloi, Karala, Kanjháola, Jaunti, Tihar Nángal, Riha, Bijwásan, Mitraon, Jharaunda, Bhawána, Narela, Shamspur, Alipur; in the Ballabgarh *tahsíl*, at Mahrauli, Ballabgarh, Farídábád, Mothki Masjid, Chirágh Dehli, Badarpur, Tilpat, Bhopani Khán, Kherí Tagah, Gharura, Atali, Mohana Sikia, Paota; in the Sunipat *tahsíl*, at Sunipat, Nangal Jakhaulí, Kailánah, Murthal Bhatgaon, Larsauli, Ganaur Purkhas, Garhi Bráhminan, Rohat, Gohnah, Kundal. There are primary schools for girls at Nizám-ul-din and Ballabgarh. The district lies within the Delhi circle, which forms the charge of the Inspector of Schools at Dehli. Table No. XIII gives statistics of education collected at the Census of 1881, and the general state of education has already been described at page 53.

Besides these district schools, there are several owing their origin to private enterprise. Foremost of all comes the Anglo-Arabic School. It is supported by the proceeds of the Ihtimád-ul Daula endowment fund. Ihtimád-ul Daula, Nawáb Fázil Ali Khán, prime minister in the Court of Oude, in 1829 endowed the Dehli College with the sum of Rs. 70,000. The income of the endowment has been applied exclusively to the education of the Muhammadans of Dehli since 1872, when the present school was established. On the 31st March 1883 it consisted of—

(1) Middle Department	30 boys
(2) Upper Primary Department	89 "
(3) Lower " "	187 "
Total	306 boys.

The next institution to be noticed is the Government Normal School for the training of vernacular teachers or students, who are sent up from all the districts of the Ambála circle for employment in the Vernacular Schools. On the 31st March 1883 there were 61 men under training. Attached to the Normal School is a Model School, consisting of a Lower Primary School. On the 31st March 1883 it contained 34 pupils. In addition to the schools mentioned above, there are the following aided schools: The Cambridge Mission College,

Education.

which contained at the close of the year 1882-83, nine pupils; the numbers have since increased.

St. Stephen's Mission High School	... ...	10
" Middle School	... ...	46
" Upper Primary School	... ...	108
" Lower " "	... ...	464
	Total ..	625

The Anglo-Sanscrit School maintained by the subscriptions of some of the Hindu gentlemen of Delhi. It contained on the 31st March 1883:—

Middle Department	... ...	33
Upper Primary Department	... ...	43
Lower " "	... ...	81
	Total	157

The S. P. G. European Training School : four pupils.

The S. P. G. Station School for Europeans and Eurasians; 21 pupils.

The S. P. G. Female Schools ; 187 pupils.

The Baptist Mission Girls' School ; 49 pupils.

The Baptist Mission Schools for low caste boys, 27 in number, of which 16 are in the city of Delhi, and the remainder in various places in the district within a day's journey from head-quarters. On the 31st March 1883, they contained nearly 1,000 pupils.

The Mission Schools have already been described in Chapter III (pages 63ff.) Below will be found separate accounts of the Delhi College and the Industrial, Normal, District, and Anglo-Arabic Schools.

The Delhi College.

The Delhi College has ceased to exist since 1st April 1877. It was abolished with a view to concentrating the higher teaching power of the province at Lahore. Its abolition is still much regretted by the inhabitants, and attempts have been made, though as yet without success, to obtain funds for its re-establishment by private subscriptions. It was originally a college for the education of Musalmáns in Oriental literature, science and art, and was established at Delhi in 1792, and supported by subscriptions from the wealthy residents of Delhi belonging to that creed. In or about the year 1824 this college was made the foundation for a superior college, and taken over by Government, who subsequently added to it an English Department, which was called the Delhi Institution. The college thus formed and brought under the control of Government was in 1829 endowed by a munificent donation of Rs. 1,70,000 by the late Nawáb Ihtimád-ul Daula, then Prime Minister at the Court of Oudh, and a resident of Delhi. To perpetuate the memory of the donor a marble slab bearing his name and stating the amount of the donation was set up in 1840 by Government on one of the walls of Ghaziuddín Khán's tomb, with which it appears a college had been associated, and in which the college thus endowed was located. Subsequently the college, including both the English and the Oriental Departments, was removed to a more commodious building near the Cashmere Gate. Its first principal was Dr. Boutas, who was succeeded by the eminent orien-

Chapter V, A.

General and Military.

The Delhi College.

talist Dr. Springer. Mr. Cargill was the next principal, and after him Mr. J. Taylor, who lost his life in Delhi at the outbreak of the Mutiny through the treachery of a Muhammadan whom he trusted. The Library and School were completely sacked during the Mutiny, but many of the Oriental works were recovered after the outbreak was quelled. A new institution was founded in 1858, and was affiliated to the University of Calcutta in 1864. The old college attained to great celebrity as an educational institution and produced many good scholars. Its pupils are to be found in positions of trust throughout Upper India. It educated up to the degree standards of the Calcutta University; and since 1868 some of the highest places, both in the B. A. and M. A. examinations, have been held by the students of this institution.

District school.

In the beginning of 1858, after peace was restored in Delhi, a *tahsíli* school was established in the building at present occupied by the primary school in the Cháori Bázár; and in the latter part of the same year this was converted into a District School, Master Rám Chandar being appointed the first head master, and the expenses of the establishment being borne by the Nawáb Fund. The school is held in the large block of buildings between the dák bungalow and the church, which was originally the residence of Nawáb Abdul Ahad Khán, one of the Ministers of the Emperor Sháh Jahán. The compound contains $3\frac{2}{5}$ acres of land and a boarding house for rural stipend-holders. The building consists of a large hall, which contains the library, an examination room 90 × 211, and five good-sized rooms for the high school classes, the drawing master, and the Sanskrit teacher. It would appear that from the date of Lord Lake's annexation of the Delhi *subáh* in the beginning of the present century up to the year 1842, the building continued to be used as the Residency. From the latter year, up to the Mutiny, it was occupied by the college classes and the principal. After the Mutiny, up to 1866 (when it was made over to the education authorities for the use of the college classes), it was converted into quarters for a battery of artillery. The school and its branches are under the superintendence of a European head master assisted by four teachers of English, Mathematics, and general knowledge, (of whom two are Europeans,) an Arabic teacher, a Pandit, and three Persian and Vernacular teachers. There is also a Librarian, in whose custody is the Library of the extinct Delhi College. The foregoing are employed in the High and Middle Schools only. In the Upper Primary School, situated in the city, four English and three Vernacular teachers are employed. The Lower Primary in the same building has five Vernacular teachers, and in the three branch schools in different parts of the city nine teachers are employed. Statistics for the last five years are given at the top of next page.

Normal School.

A Normal School for training Vernacular school-masters was established at Delhi in 1860, and in 1864 a similar institution was amalgamated with it, which up to this time had existed at Ambála. The Normal School is intended to train and instruct school-masters and candidates for teacherships in the Primary Schools of the Ambála circle of inspection, which includes the Delhi, Hissár, and Ambála divisions. For several years previous to the opening

Chapter V, A.

General and Military.

District School.

Name of School.	Year.	Expenditure.	Monthly average number of pupils.	Number of pupils passed the Cal. Uni-examination.	Number of pupils passed the P. U. examination.	Number of pupils passed the M. S. examination.
Secondary.	1878-79	Rs. 23,311	296	8	22	10
	1879-80	" 22,659	179	2	17	17
	1880-81	" 17,643	123	9	9	4
	1881-82	" 19,131	132	6	4	13
	1882-83	" 20,270	172	7	3	16

Name of School.	Year.	Expenditure	Monthly average number of pupils.	Number of pupils passed the U. P. Primary School examination.	Number of pupils passed the L. P. School examination.
Primary.	1878-79	Rs. 4,848	502	......	39
	1879-80	" 5,011	540	......	42
	1880-81	" 5,649	514	30	64
	1881-82	" 5,432	567	31	121
	1882-83	" 5,525	598	60	91

Normal School.

of the Central Training College at Lahore, the course of study extended over two years for Primary School teachers and a third year for those who were fitted to qualify for certificates of ability to teach in Middle Schools. At the present time no student remains under instruction for more than two years, and for those who have previously passed the Middle School examination, or in fact nearly all, the course lasts only one year. Teachers already in employ, and candidates for employment, are selected by Deputy Commissioners for training; while in the Normal School they revise and make themselves perfect in the subjects of study prescribed for Vernacular Schools, and are besides instructed in the art of teaching. There is a small practising school in connection with the Normal School, in which the students all take their turns as teachers under the supervision of one of the staff. The Normal School occupies a hired building known as the Kalán Mahal, or Kala Mahal near the great mosque. Besides the class rooms, there are chambers for about fifty students, the usual number in residence. The staff consists of a head master and three teachers, one of whom has to superintend the practising school. The statement at the top of next page shews the expenditure, number of students, and examination results for five years.

Industrial School.

On the 2nd January 1883, at the instance of Colonel Holroyd, the Director of Public Instruction, at a meeting held in the Town Hall, it was resolved that—I. It was highly desirable to establish a School of Industrial Art at Delhi, and that instruction should be given in the following branches: Drawing, carpentry, wood and stone-carving, plaster work, pottery, iron work, and carpet-weaving. II. That application should be made to the Municipality to supply the necessary funds. III. That a Museum for the exhibition of

Chapter V, A.

General and Military.

Normal School.

Years.		Expenditure.	Number on the rolls.	Results of Examinations. Passed in				Remarks.
				1st Grade.	2nd Grade.	3rd Grade.	4th Grade.	
1878-79	...	8,544	115*	1	...	...	11	
1879-80	...	6,421	72	...	3	3	17	
1880-81	...	5,589	52	1	10	...	14	
1881-82	...	4,708	64	No. 3rd	class	4	35	
1882-83	...	4,708	60	Results	not know	n yet.		

* Includes 48 students of the Model School attached to Normal School.

Industrial School.

specimens of various trades and arts of pure Delhi manufacture should be formed. On Colonel Holroyd's application, the Municipal Committee voted a lump sum of Rs. 3,000 for initial expenses, and a monthly grant of Rs. 250 for the establishment and the pay of pupils.

The Managing Committee accordingly opened the school on the 1st March in a house known as Amu Jan ka Diwan Khánah, near the Tahawwur Masjid, with a staff consisting of a manager, three carpenters, a smith, a weaver, and a carpet-weaver. Since the school has been opened, the attendance has averaged 28, *viz.*, twelve carpet-weavers, twelve carpenters and four in the smithy. The carpet-weavers have already turned out fair work, and will exhibit probably this year in Calcutta. The boys employed in this trade are *bhisties'* sons, *chamárs* and Christians. The carpenters' class is composed of carpenters' sons. They have made the school furniture from designs furnished by the manager, and are learning freehand drawing. The smith class is a small one, and is composed of Christian lads. Owing to the difficulty of obtaining a teacher in the Punjab, the Committee propose employing an assistant teacher of the School of Art Bombay. Unfortunately the Lahore School of Art cannot supply one, though at one time it was expected that a competent draughtsman could be got from there. There are no female classes, and no examinations have been yet held; but in addition to the small sums paid daily to the boys, it is proposed to give scholarships by and bye when the school is more advanced. A large quantity of books on art, drawing, perspective, geometry and mechanics, as well as tools and a lathe, have been ordered from England; and when they arrive the school, with a good teacher, will undoubtedly make rapid progress and have increased attendance, as Delhi boys are very apt.

Anglo-Arabic School.

After the recapture of Dehli in 1857, a school was established on the ruins of the old Dehli College, which was at first supported entirely from the proceeds of the Nawáb Fund, and afterwards partly from that fund, and partly from Government grant. In 1872 it was considered advisable by the local Government to spend the income of the Nawáb Fund exclusively for the education of Musalmáns, and

Anglo-Arabic School.

the school now designated the Anglo-Arabic School was established. The school has therefore been in existence in its present form for more than ten years, during which time it has made satisfactory progress. The numbers on the rolls on 31st March 1883 amounted to 306 with an average daily attendance amounting to 272. The school is under the control of the Department of Public Instruction, the Government being a trustee to the fund, and is managed by a committee consisting of ten Muhammadan gentlemen, four official members and a secretary. The boys attending the school are instructed in English and Vernacular, Arabic being an optional subject for those who desire to learn it. The school consists of a Middle Department comprising thirty pupils, and a Primary Department containing 276 boys. The school is held in a native building, which is sufficiently commodious. The school has passed forty-one students in the Middle School examinations since the date of its establishment. The staff consists of a head master and thirteen other teachers.

Medical.

Table No. XXXVIII gives separate figures for the last five years for each of the dispensaries of the district, which are under the general control of the Civil Surgeon, and in the immediate charge of Assistant Surgeons at Dehli (the Central Dispensary) and at Sunipat, and of hospital assistants at two branch dispensaries at Dehli (the Lal Kua branch and Sadr Bazar branch), and at the Dispensaries of Ballabgarh, Farídábád, Najafgarh, Mahrauli and the Dehli Eye Hospital. There is a Lunatic Asylum near the jail, and a Lock hospital. of the first class in the city; the latter founded in August 1870. There is also a hospital for women and children managed by the S. P. G. Mission in Dehli, and a training class for native nurses under the same management. There is a large Civil Hospital in the town near the Jamma Masjid, capable of holding a large number of patients.

Dehli Civil Hospital.

Before the Mutiny of 1857, the hospital was situated somewhere near the Fort, on the north side near a tank called the Laldigi. It contained eight in door patients, and but very little is known about it, as the records were all destroyed on the fatal 10th May 1857, when the Sub-Assistant Surgeon, Chimman Lal, a Christian and a Delhi Káyath by caste, fell the very first victim, being pointed out to the mutineer sowárs by one of his establishment. The Civil Surgeon, Dr. Balfour, who escaped to Kailana, where he with others was protected by a *lambardár* Giána of that village, returned after the capture, and opened a small dispensary in the, Ballimaran, putting a native doctor in charge. The dispensary remained in Ballimaran for three years, the old hospital having been demolished.

In 1861 the present hospital was completed under Dr. Smith's superintendence. It has accommodation for 28 males and separate quarters for five or six females. The building is conveniently situated for certain parts of the city, but is quite inadequate to the growing needs of Delhi, leaving aside the fact of its extreme unhealthiness, which has obliged the Civil Surgeon to rent a native house to keep operation cases in. It is, however, proposed to build a proper hospital outside the Lahore Gate on the Okhlah canal, which will be

Chapter V, A.

General and Military.

Delhi Civil Hospital

convenient for the populous suburbs, as well as for the city. The hospital is to contain 80 beds, and to have quarters for the staff, and a female hospital and dispensary. This hospital will front the Lahore Gate and be situated on the bank of the canal on a dry and airy site. The Revd. Mr. Smith, of the Baptist Mission, first started the Lálkua Dispensary when Vice President in 1864, and the Sadr Bazar Dispensary was founded by the Civil Surgeon, Dr. Smith, in 1862, Native Doctor Gholam Ahmad Khán having held charge for the last 21 years.

Lunatic Asylum.

The Lunatic Asylum founded in 1840, existed till 1861, when it was broken up and the whole of the inmates transferred to Lahore. From 1861 to 1867, the building was used for jail workshops, but in the latter year was again taken for the purpose for which it was originally intended. The Asylum covers an oblong plot of ground, 420 feet by 470 feet; it is situated on a high and well drained position above the *khádar* and about a mile from the bed of the Jamná which runs to the east, towards which the buildings face. The outside walls are composed, as are all the buildings of the Asylum, of stone and lime mortar masonry; they are substantial and well built. The building consists of an office, observation wards, separate cells, hospital, work shops, principal ward, and separate rooms, wards for women, and European wards.

There is room for males	85
" " females	15
Total... ..	100

The present staff consists of one Deputy Superintendent, one hospital assistant, one head warder, eleven warders, one matron, two assistant and menials. The general management of the Asylum is as follows: The males sleep, either in the barrack, or in the rooms in the central yard. Four keepers sleep in the barrack with the patients. Criminals and dangerous lunatics are confined separately at night. Both the female warders pass the night with female patients. The whole of the inmates are awoke about sunrise and are taken out, and after a time, varying with the seasons, those that will work go in their various employments. They have their morning meal at 10 A.M., and rest till about 2; and then working till 5 P. M., when they are bathed and washed in summer and have their evening meal; after dinner they amuse themselves with musical instrument and cards, &c., till sunset or dark; when they go to bed. The following figures show the working of the Asylum for the last five years.

Year.	Cash expended.	Value of article received from manufacture department.	Total.	Male.	Female.	Total.
1878 ...	9,116	134	9,250	116	29	145
1879 ...	8,243	553	8,796	94	24	118
1880 ...	7,795	447	8,243	76	19	95
1881 ...	9,147	662	9,810	85	20	105
1882 ...	10,467	507	10,974	93	22	115

Chapter V, A.

General and Military.

Ecclesiastical.

There is a large church at Delhi built by Colonel Skinner. A chaplain is generally posted to the station, and besides this there are three Missions attached to Delhi, the Society for the Propagation of the Gospel, the Cambridge Mission, and the Baptist Mission. There is also a Roman Catholic Chaplain. In addition to the church there are three other places of worship, one belonging to the S. P. G. and Cambridge Mission, one,to the Baptist Mission, and one to the Roman Catholic Church, the latter being for the benefit of the garrison in the fort.

Head-quarters of other Departments.

The portion of the East Indian Railway which runs through the district is in the charge of the Deputy Traffic Superintendent, Allahábád, while that of the Sind Panjáb and Delhi Railway is in the charge of the Traffic Superintendent at Lahore. That part of the Rajputana-Malwa Railway running through the district is controlled by the Manager living at Ajmir. The head offices of the three railways are at Calcutta, Lahore and Ajmir, respectively. The head-quarters of the Rewari-Fírozpúr Railway are also at Delhi. The Western Jamná Canal, as far up as Rer, is under the charge of the Executive Engineer, Delhi Division, whose head-quarters are at Delhi. The Superintending Engineer of the Canal also has his head-quarters at Delhi. The Agra Canal is under the control of the North-Western Provinces. This is under the charge of the Executive Engineer whose head-quarters are at Delhi. It is under the general control of the Superintending Engineer, 3rd Circle of Irrigation, North-Western Provinces, whose head-quarters are also at Delhi. The Grand Trunk Road north of Delhi is under the Executive Engineer, General Branch at Delhi. He is subordinate to the Superintending Engineer, General Branch at Jálandhar. The military buildings are in charge of the Executive Engineer, Military Works at Mirath, and the Superintending Engineer, Military Works, also at Mirath. The Telegraph lines and offices of the district are controlled by the Telegraph Superintendent of Ambálah, and the Post Offices by the Superintendent of Post Offices at Delhi.

Cantonments, troops, &c.

The only military station in the district is the cantonment of Delhi, situated inside the walls, about two miles from the Civil Lines, and the Native Cavalry lines, situated close to the Civil Lines. The Cantonment is situated partly inside the fort, and partly outside. The ordinary garrison of Delhi consists of one garrison battery, one wing of a British Infantry Regiment, and one Regiment of Native Infantry. The Cantonment forms part of the Mirath Division, and the troops are under the command of the General Officer Commanding at Mirath. The total garrison of the district, as it stood in July 1882, is shown in the margin. The figures are taken from the Quarter-Master General's Distribution List for that month, and include those who are sick or absent. In Delhi, there being no Government Storage Depôt, or Manufactory of warlike stores, the

Regimental and Staff Officers.	Non-commissioned Officers and Men.			
	Artillery.	Native Cavalry.	British Infantry.	Native Infantry.
34	117	65	348	695

Chapter V, A.

General and Military.

Cantonments, troops, &c.

defences are mainly confined to the double object of commanding the city, and protecting the Railway communication across the Jamná. This is at present secured by the Fort, and by a Garrison consisting of:—

1 Battery Garrison Artillery.
4 Companies of European Infantry.
1 Regiment of Native Infantry.

the Europeans residing in the Fort, and the Native Regiment in the adjoining lines of Daryá Ganj. The Fort wall is about 1¼ miles in circumference, and on the east side, where coincident with the city wall, consists of a simple vaulted drop of 20 feet to the bed of the Jamná, the remainder being a masonry wall 40 feet high with a double tier of loopholes, and protected by a vaulted ditch 12 feet deep with a covered way and glacis. The two main gates, the Lahore Gate on the west, and Delhi on the south, are protected by rectangular masonry envelopes armed with ordnance, firing through embrasures. The flanks of these envelopes spring from the *enceinte*, which commands them by ten feet. On the north side is the important out-work of Salímgarh, separated from the *enceinte* by a small channel of the Jamná 30 yards wide, spanned by a masonry bridge. This work has an earthen parapet with stone *revetment*, 25 feet high. Its interior is commanded from the *enceinte* and the Railway passes along the level of its *terre plein*, entering by a masonry bridge over the small channel of the Jamná at the west, and passing directly on to the main Jamná bridge on the east side. On each of the main gate envelopes are mounted :—

Two 24-pr.	...	... Smooth-bore guns
„ 8-inch	...	... Howitzers
„ 8-inch	..	.. Mortars

which both command the town and sweep the ditch. On an indicated portion of the N. face of the *enceinte* are two 8-inch howitzers sweeping the line of Railway in opposite directions, and in Salímgarh are two 24-pr. smoothbore guns commanding the bridge and river, and one 8-inch howitzer sweeping the main exit from the town at the east, whilst finally within the fort are four bras 9-pr. field guns, and two 12-pr. brass howitzers. The total ordnance thus available is :—

Six 24-pr.	..	.. S. B. Guns
Seven 8-inch	..	.. Howitzers
Four 8- „	..	... Mortars
Six		... Field pieces

for which the requisite stores and 200 rounds per gun are maintained within the fort. The fort is commanded from the Ridge at distances varying from 1,000 to 3,000 yards, and the view of the intervening ground is much interfered with by foliage and buildings, but the glacis gives a good, clear field of fire round the wall for 500 yards, except at the north-west, where considerable clearing would be necessary in anticipation of a siege. A scheme for re-armament of the fort, including rifled 64-pr. and 40-pr. guns, also six rifled howitzers, has been matured, and some of the *emplements* on the eastern face prepared, but this will not be taken in hand till

Chapter V, B.

Land and Land Revenue.

that at Agra is completed. Within the fort is ample barrack accommodation for 250 additional Europeans and considerable ancient storage-room, but no supplies or transport are maintained, except to suffice for the current routine requirements of a stationary garrison.

There is is one Company of the 1st Punjab Volunteer Rifles, *viz.* the F. company stationed here, whose head-quarters are to Lahore. It is recruited principally from the European and Eurasian community of Delhi, except Railway employés, who join their respective Railway Corps. The enrolled strength of the Company on the 1st April 1883 was about 37.

SECTION B.—LAND AND LAND REVENUE.

Early Revenue Administration.

The early revenue administration of the district was crude, not to say arbitrary. The great idea of successfully managing the revenue appears to have been to put strong pressure on subordinates, beginning at the *tahsíldár*, who was held personally responsible for balances. This pressure was passed on to the *zamíndárs* in the shape of quartering *sowárs*, on the villages till the revenue was paid. Under such circumstances, it was not strange that complaints should come up from time to time that "cultivators in whole sets of villages are absconding *en masse*," either during or at the end of the short lease given them. It was considered a measure of relief to proclaim that "Government would take only Re. 1 a *kacha bigha* in the Khadar lands and 12 annas in the Bángar. These indulgent rates give about Rs. 4-12 and Rs. 3-10 as the incidence per acre, Reports of distressed villages mentioned in 1824 that, 'Chatera Báhadarpur' (which has just been re-assessed at Rs. 860) " paying Rs. 1,400 should pay Rs. 500;" "Mallah Mazra, assessed at Rs. 2,180, beats Chatera Bahádarpur hollow in poverty and privation," Of Kimáshpur assessed at Rs. 4,130, the "*zamíndárs* are tolerably intimate with poverty"; while another village, Atáel, "has not *a tale* to tell now-a-days, for it is deserted !" In 1826, statistics of some villages in Sunipat *tahsíl* are given, which may be usefully compared with corresponding data, as obtained at the Regular Settlement, 1842, and now during the operations recently concluded. The figures are given on the next page.

Summary Settlements.

The nature of the early revenue arrangements has already been described as very summary. They appear to have been made as much as possible on the basis of existing arrangements, without considering whether those assessments were originally just or not, or whether changed circumstances did not make it necessary to modify them materially. Of course when a village, or a set of villages broke down entirely, and the cultivators absconded in a body, it became obviously the only thing to do to remodel, and probably to moderate the assessment. And in this way, Settlement operations were always more or less in progress, the agreements being intended apparently to last only for a few years, or until they should break

Chapter V, B.

Land and Land Revenue.

Early Revenue Administration.

VILLAGES.	Year.	Inhabitants.	Cultivators.	Ploughs.	Wells.	Cattle.	Total Area.	Cultivable.	*Jamá* settled in 1821-22.	Subsequent *jamas*.
1.—Pabsara ...	1826	97	41	17	13	82	2.636	2,236	850	850
	1842	...	...	...	...	...	877	749	...	704
	1880	472	42	43	16	535	863	782	...	1,025
2.—Chhidya Yúsafpur ...	1826	41	15	10	4	26	1,080	740	850	750
	1842	...	...	...	...	...	528	424	...	581
	1880	198	49	28	7	148	523	508	...	680
3.—Ghasáoli	1826	251	69	31	24	310	1,944	1,344	2,000	1,900
	1842	...	..	...	..	...	1,855	1,212	...	1,302
	1880	880	131	111	74	1,003	1.517	1,272	...	2.000
4.—Ghayáspur ...	1826	164	25	10	10	121	2,200	1,700	1,130	800
	1842	...	..	..		...	1,112	1,058	...	981
	1880	340	83	46	39	182	1,049	949	..	1,100
5.—Sunpera ...	1826	120	29	12	10	216	2,527	2,291	1,260	1,150
	1842	...	...	...	..	...	1,045	868	...	549
	1880	606	77	69	49	338	1,072	1.019		1,150
6.—Pabnera ...	1826	283	67	24	19	350	2,014	1,834	2,900	2,500
	1842	...	...	...	...	...	822	763	...	1.160
	1880	869	107	64	26	338	629	528	...	1,025
7.—Patti Bráhmanán...	1826	15	4	2	6	28	250	240	400	200
	1842	...	...	..	...		316	314	...	200
	1880	56	12	13	6	60	321	314	...	225
8.—Begáh ...	1826	840	154	68	44	850	6,007	5,786	6,741	4,250
	1842	...		...	...	...	3,734	3,629	...	3,571
	1880	2,168	332	333	118	1,784	3,984	3,650	...	4,800
9.—Chándauli ...	1826	84	21	161	12	211	650	618	...	950
	1842	...	...	...		...	853	645	...	905
	1880	330	76	32	26	243	833	732	...	750

Summary Settlements.

down. If an estate was fairly lucky, the Settlements made with it appear to have been in Sunipat as follows :—

1.—Before 1817—the existing demand.
2.—From 1817-18 to 1824-25—First Summary Settlement.
3.—From 1825-26 to 1829-30—An agreement. or series of agreements, hardly authorised enough to be called a Settlement.
4.—From 1830-31 to 1840-41—Second Summary Settlement.
5.—From 1841-42 to 1872—Regular Settlement.

But in the earlier period it is not uncommon to find years noted as *tahsíl khám*, showing the assessment to have broken down.* Under such circumstances, farms naturally were common, and when they broke down direct management had to be resorted to with very significant results. Thus, in 1824, in an occasional report, 48 villages are mentioned as held in farm ; while, in about the same year, 39 villages which had been assessed at Rs. 70,005, when held under

* The village of Bidhnaulí, for instance, experienced the following vicissitudes of assessment :—

From 1819-20 to 1822-23	Rs.	2.250
From 1823-24—1824-25 *tahsíl khám*, average ...	,,	1,774
From 1825-26—1829-30	,,	2.300
From 1830-31—1832-33	,,	2,222
From 1833-34—1842-43	,,	1,905
From 1843-44—1873-74	,,	1,651

This looks as though there had been considerable over-assessment at first ; on the other hand in a village close by, Bágru, a rapid increase was made.

From 1817-18 to 1825-26 it paid...	Rs.	1,651
From 1826-27 to 1833-34	,,	1,659
In 1834-35	,,	2,286
In 1835-36	,,	2,857
From 1836-37 to 1843-44	,,	3,576
From 1844-45 onward	,,	3,900

direct management, brought in only Rs. 50,544. In the case of nine villages, the leases aggregating Rs. 32,131 had been cancelled by the second member of the Board, and the *khám* collections in the following year reached only Rs. 13,375 !

Chapter V, B.

Land and Land Revenue.

Summary Settlements.

It would appear, then, that, up to the Regular Settlement, Sunipat shared the misfortunes of Pánipat. The summary assessments were equally harsh, the measures taken for realisation were equally oppressive and unsuccessful. In fact, in 1839 the *tahsil* was so badly in debt to the Treasury, that Government adopted the common sense remedy of repudiating its own exactions by striking off the large balances then existing, which were indeed practically irrecoverable. There is, however, in the office a manuscript report on Pánipat and Sunipat, signed by J. Lawrence, in which notes are made on each village with recommendations for new assessment. These notes appear to be in Mr. Fraser's hand writing. The following extracts are of some interest :—

"Sunipat Bángar is the finest, most populous, and best cultivated *parganah* in the district. It contains 97 *khálsa* villages, of which 77 are irrigated from the canal, and the greater part of the remaining 20 have more or less irrigation from wells. Water varies, on an average, in depth from 35 to 70 feet, but most of the villages without the canal are at the junction of the *parganah* with the *khádir* or low lands, and water therefore is seldem more than 35 feet deep. They could all have the canal, but the outlay of capital is more than small villages at a distance can afford, and to those adjoining the Khádar it is not worth the expense. Canal irrigation is carried to a very considerable extent, probably exceeding half the whole cultivated area. Independent of the actual amouut of irrigation, every village benefits more or less in proportion to its distance from the canal, the constant percolation from it affecting the soil, and increasing its productive powers most surprisingly. Wells to a considerable distance which were formerly dry are now amply supplied with water. The population of the *parganah* bears a very good proportion to the area, and at the same time is very equally spread over its surface. This circumstance, and its extensive irrigation, have rendered it a perfect garden. You may ride for miles, and see nothing but the most splendid cultivation. The survey returns of 1825 give an area of 1,05,381 acres of culturable land, of which 69,692 acres was then cultivated. Irrigation from the canal has since probably doubled, and of course the cultivation has greatly increased. The revenue of Sunipat Bángar of 1243 Fasli, was Rs. 2,57,549-9, which gives the acreage rate of Rs. 2-0-7½, and Rs. 2-15-2 on the then cultivated land. With reference to its *málguzári* area, it is the highest assessed *parganah* in the district ; with regard to its resources, or its cultivation, the lowest."

It will be noted how prosperous the condition of the country appear to have been at the time (1836).

The Regular Settlement of Sunipat.

In 1842 a Regular Settlement of Sunipat was made by Mr. Edmonstone, the proposals of Mr. Fraser, who had been entrusted with the task in the first instance, being disallowed. That Settlement gave a reduction in the Bángar of Rs. 2,949 and in the Khádar of Rs. 19,761, on the regular Government demand. The payments, however, on the cesses and police were increased, in the Bángar by Rs. 10,051, in the Khádar by Rs. 4,908. So that the net result on the whole *tahsíl* was a reduction of Rs. 7,751 as shown on next page.

Chapter V, B.

Land and Land Revenue.

The Regular Settlement of Sunipat.

			Jama.	Lambar-dári.	Road.	Police.	TOTAL.
Sunipat	Bángar	Former ...	2,52.131	11,593	...	...	2,63.724
		Regular Settlement ...	2,49,182	12,462	2,618	6,564	2.70.826
,,	Khádar	Former ...	1,27,801	5,545	...	...	1,33,346
		Regular Settlement ...	1.08,040	5,394	1,135	3.924	1,18,493
CHANGE ON TOTAL TAHSIL ...			−22,710	+718	+3,753	+10,488	−7,751

Mr. Edmonstone considered these reductions necessary. "It was ascertained," says he speaking more particularly of the Khádar, "that the greatest difficulty had been invariably experienced in "realizing the demands of Government; that, notwithstanding *strenu-"ous and well sustained efforts*, the district officers and their subordinates had been baffled; and that balances had been frequent and large."

Its working.

Relief was sufficiently given only in the Khádar—the assessment there with one or two exceptions, for which there are especial reasons, was moderate, and its results has been a success. The Bángar assessment was too high; that is, for a continuance. The soil then must have been still in its first burst of glorious fruitfulness under canal irrigation. The sight of a good Bángar village then must indeed have been one to inspire confidence; the *shor* was a very imperfectly understood evil, and its power of expansion could not be foreseen. So the heavy rates of Rs. 3-2 and Rs. 1-10 were levied on the *nahri* and *báráni* lands with confidence, and the Settlement Officer was able to predict "a speedy and perfect restoration of the *parganah* "(Bángar) to that state of prosperity which has hitherto distinguished "it." These expectations were partly realized. The palmy days of the Bángar were probably the first ten years of the Regular Settlement. Enormous irrigation was carried on, and as yet it had not made its slowly, but surely working result felt. As years went on however, the calamity became apparent, and the series of reductions began, which in all amount to nearly 23,000 rupees.*

After this there were no more reductions, doubtless because the end of the Settlement term was drawing near. Meanwhile the Khádar was going on favourably; there seems reasons to believe that throughout the thirty years of Settlement its development has been steady and decided. Like the "happy country" of classic reference, its annals are a blank, or nearly so; the total balances being Rs. 2,942, an insignificant amount which remained unpaid on the one or two villages which by some oversight had remained heavily burdened, and even these came short only in the bad years, 1860-63. The balances in the Bángar too were very insignificant, Rs. 1,456; but there was an ever increasing and much more destructive loss than that of money going on, the effect of which is only now seen. The results of the Settlement working may thus be summed up. For the Bángar, bad, because the ground and the men cultivating it are not in so good condition as at the beginning.

* There was a recovery in 1872 of 1,048 rupees, levied on some *shor* land in Thánà Khurd, renovated by canal-silting—a most interesting and pretty successful experiment.

For the Khádar, good, because the ground is not injured, nay in some respects better, and the men too are better off now than in 1842.

Early Settlements in the Delhi *tahsíl*.

In the central division there was a Settlement by Mr. J. H. Taylor which is alluded to by Mr. Lawrence in reporting the Regular Settlement of 1844, but it does not appear in what year this was made. The arrangements would seem to have been slightly more permanent than in Sunipat, but the number of farms shows that the *zamíndárs* were not happy under them. Mr. J. Lawrence, in his report of 1844, on the Regular Settlement then made by him, says:—

"Of 346 villages, the engagements of 214 are made with the proprietors, and 132 with farmers; of these latter all but 40, which continue until the end of Settlement, will gradually, during the next eight years, revert to the owners. The number of farming leases is no doubt an evil, but it appears to have been an unavoidable one. The practice seems always to have prevailed in the district to a great extent. Indeed I believe there have always been more farming leases here than in all other districts of the division put together."*

The assessment he reported for these 346 villages was Rs. 3,57,852, being a decrease of Rs. 36,984 or nearly 10 per cent. on Mr. Taylor's *jama* of Rs. 3,94,836; and the incidence per cultivated acre of the revised amount was Rs. 2-0-9. That of the southern *parganah*, which included the hilly villages near Mahrauli, was Rs. 1-11-7, as against Rs. 2-5-5. In comparing these results with the present *tahsíl* the partial difference in limits must be remembered. This relief was considerable, and doubtless was necessary; but if so, it is not easy to understand the strong terms in which the prosperity of the country is spoken of. The report says:—

"In a flourishing *parganah* on this side the river, we have no large *zamíndár* with his lac or two lacs of annual income; but on the other hand we have thousands of small proprietors each with his brood mare, his buffaloes, his oxen, in short, with everything that marks a comfortable position in life. In no part of the Western Provinces, of which I have had experience, are the tenures so complete and so well recognized as here; no district where the ancient village communities are in such excellent preservation, or where the practice of our civil courts has hitherto done so little harm."

Since Settlement there is not much to record of this part of the district. Since the Mutiny the balances have been Rs. 56,381, the suspensions Rs. 99,782, and the remissions Rs. 21,368, giving for the yearly average, as percentages on the annual demand, balances 1·6 per cent. suspensions 1·7, and remissions ·4 per cent. Before the Mutiny, under an authority not to be ascertained, reductions were given to the amount of Rs. 3,874; and after the Mutiny it was considered necessary further to give relief in certain villages, especially those belonging to the confiscated estates of the rebel Nawáb of Jhajjar. The amount thus remitted was Rs. 7,541, which in addition to the sum above-mentioned, gives Rs. 11,415 as the total amount reduced since Settlement.

Ballabgarh. Early Settlements.

Of Ballabgarh, 126 villages belonged to the Rája of Ballabgarh and first came into our hands after the Mutiny. The first Settle-

* There is a village in this *tahsíl* said to have been sold up for a balance of less than ten rupees! The farmer himself bought it.

Chapter V, B.

Land and Land Revenue.

Ballabgarh. Early Settlements.

ment of these was made for Rs. 1,55,701 for one year; then came a second of three years at Rs. 1,21,440; and then one for seven years at Rs. 99,212. In a manuscript report by Mr. Cooper, Deputy Commissioner of Delhi, of 1861, it is said:—

"The *parganah* came under attachment in September 1857. Notwithstanding rebellion abroad, and the agitation and turmoil around Delhi, agriculture went on with characteristic indifference to political strife, and the crops sown in June and July of 1857 were peacefully reaped in October. What is more, the heavy instalment of revenue of the deposed chieftain was promptly paid up to to the last pie. A Summary Settlement was at once made upon the average of ten years' revenue collections according to the Rája's accounts, on a total of Rs. 1,68,151-8-0."

This *jama* referred to 134 villages, eight of which had been subsequently transferred to Gurgáon aud Bulandshahr. Mr. Cooper goes on to observe:—

"As might have been expected, the late chief's collections were very heavy. In the year 1855 he had absolutely laid a tax of Rs. 1,97,000. The usual consequence ensued; half the villagers deserted, and the enraged chieftain rack-rented the remainder. The smallest amount, in a very bad season, was Rs. 1,26,000. In such a year, one-half would, under our system, have been collected. The assessment now sanctioned is Rs. 1,29,849. The calculations were thus:—

Five years average	1,60,355
12 years do.	1,75,558
Summary Settlement	1,69,538
By rates	1,52,502
Extra Assistant's proposals	1,52,912
Revised and sanctioned	1,29,859

"The reduction on the Summary Settlement amounts to nearly Rs. 40,000. The result is a happy mean between the heavily assessed southern *parganah*, and the very light rates of the adjoining *parganah* Gurgáon."

The seven years' Settlement was made by Bansí Lál. The other eight villages, not regularly settled, were *jágírs*. Of the 148 villages of Regular Settlement:—

Mr. Wood gives the summary *jama* as ...	Rs.	1,06,380
As the *jama* stood before the Mutiny ...	"	94,039
The demand before revision ...	"	92,829
After the Mutiny a reduction of ...	"	2,226 had been given.

Among these 149 villages, must be reckoned those of the *parganah* Páli-Pákal. This *parganah* (see printed report of about 1841 by G. Barnes) was, at the conquest of Delhi, given "by General "Lord Lake to the Rájá of Ballabgarh, for the purpose of defraying "the expenses of a police establishment to patrol the road between "Delhi and Palwal, which at that time was lined on either side by "dense jungle, and infested with thieves. The original grant was simply "for life; but, on the application of the Resident of Delhi, the "*parganah* remained in the possession of the Ballabgarh family till "the death of Kanwar Ráj Singh in 1832, A. D. On its lapse, the "*parganah* comprised 43 villages, of which 18 were entirely removed "from the main body of the *parganah*, and occupied isolated situations "within the limits of the adjacent division." Twenty-five of the old set were kept in the *parganah* by Mr. Barnes, together with two from

Chapter V, B.

Land and Land Revenue.

Ballabgarh. Early Settlement.

Sohna,* while the others were distributed among the neighbouring *parganahs*. Mr. Barnes, in the report referred to, gives a concise and graphic account of the circumstances of this part of the district. It would seem that the Summary Settlement here was made in 1832, and that W. Fraser, Commissioner of Delhi in 1834, made a Settlement for 20 years. Mr. Barnes's revision thus broke in half-way on this term. The *jama* assessed by him was Rs. 25,304, being a reduction of Rs. 5,380 on Mr. Fraser's Settlement. Of this *tahsíl* as a whole it may be said that the previous assessment, though unequal in incidence in different parts, was, in 1872, when the operations of the recent revision began, decidedly light.

The old assessments.

The collections of revenue for the district under the Settlements lately revised were, for 1877-78 (the last year in which the old arrangements remained in their entirety), fixed land revenue, Rs. 8,80,170; fluctuating and miscellaneous land-revenue, Rs. 12,940; local rates Rs. 59,308.

Revision of 1872-80.

The district of Delhi was placed under revision of Settlement by Punjab Government Notification 119 of 29th January 1872. At that time the distribution of villages among the three *tahsíls* was as follows: Ballabgarh 282, Delhi 305, Sunipat 211, total 798 villages. During Settlement changes were made which have been detailed in Chapter II, page 27. The measurements were made on 810 villages, and assessments were announced on these; but subsequently three estates were carried over to Bulandshahr, leaving only 807 villages in the district† and 280 in Ballabgarh. Of the 798 villages put under Settlement there were‡ 600 which had already been under a regular Settlement at different times, while 198 had been under Summary Settlement only. By *tahsíls* as follows:—

Regular Settlement and Summary Settlement villages.

	Ballabgarh.	Delhi.	Sunipat.
Previously under Regular Settlement ...	148	244	208
" " Summary ...	134	61	3

Of the Summary Settlement villages in Ballabgarh, 126 had belonged to the confiscated territory of the Rája of Ballabgarh. The eight remaining were *jágírs*, or had been held in private property by the king of Delhi. Of the 61 in Delhi, 7 had belonged to the Nawáb of Jhajjar, 13 to the *jágír* of Mirza Moghal Beg, 3 to the *jágír* of Rája Jísukh Rái, 11 to the king as private property, 8 to Rámráo Pálgír, 5 to the king of Oudh, 4 to the Nawáb Bahádar Jang Khán, and the remainder to separate *jágírdárs*. The three villages in Sunipat were also *jágírs*. A detailed list of all villages for the first time under Regular Settlement in 1872 will be found in Appendix XV of Mr. Maconachie's report.

* This makes 27: the names of these were :—
Sakrauna, Sarohi, Kherí, Gújar, Nagla Jogyán, Zakupur, Karneráh, Firozpur, Alláwalpur, Páli, Majesar, Mádalpur, Bíjupur, Oli, Khori, Jamálpur, Pákal, Páotah, Dhauj, Kotlah, Mohabbatábád, Bajrí, Tikri, Kherah, Mángar, Kot, Sulákhri, Alampur, Nurpur, Dhumspur, Kharkharáh, Ranhera.

† Its boundary with the North-West Provinces district of Mirath and Bulandshahr had been determined as the deep stream of the river Jamná, [See Notification No. 4 of January 3rd, 1870, Punjab Gazette.]

‡ In the first Notification the number was given as 619, but under subsequent notifications 19 more villages in Delhi were considered as having been only summarily settled.

Chapter V, B.

Land and Land Revenue.

Principles of assessment.

Settlement operations were conducted under the Land Revenue Act, XXXIII, of 1871 which came into force on January 1st, 1872, and the rules published by the Local Government in accordance therewith; the instructions for assessment were as follows:—

"The general principle of assessment to be followed is that the Government demand for land revenue shall not exceed the estimated value of half the net produce of an estate, or in other words one-half the share of the produce of an estate ordinarily receivable by the landlord either in money or kind. In applying this principle in the case of the districts above named, where produce rents prevail, special attention should be given by the Settlement Officer to produce estimates.

"In estimating the land revenue demand, the Settlement Officer will take into consideration all circumstances directly or indirectly bearing upon the assessment, such as rent rates where money rates exist, the habits and character of the people, the proximity of marts for the disposal of produce, facilities of communication, the incidence of past assessments, the existence of profits from grazing and the like. These and other considerations must be allowed their weight.

"The gross assessments for each Settlement Circle having been framed by the Settlement Officer on the principles above indicated, revenue rates on soils may be deduced therefrom, and the proposed gross assessment, together with the proposed revenue rates, must be reported to the Government for preliminary sanction, and will, when sanctioned by the Local Government, form the basis of assessment of particular estates in the circle; but in the assessment to be ultimately adopted full consideration must be given to the special circumstances for each estate. The principle laid down in Rule I is to be observed in the assessment in each case."

Officers of the Settlement.

The charge of the Settlement, as well as that of Karnál and Gurgáon, was entrusted to Mr. Oswald Wood, who remained in charge of the Delhi Settlement till November 3rd, 1877, when he gave over to Mr. Channing. After this Mr. Channing held office for a short time, with Mr. Wilson as Assistant; and, on January 10th, 1878, Mr. Maconachie took over from the latter who had been in temporary charge. Mr. Maconachie brought operations to a close in 1880 and reported upon them in the same year.

Distribution of Ballabgarh villages by circles.

The area is 385 square miles with 283 villages. Extreme length 30, and breadth 20 miles. The assessment circles were six; and are described by Mr. Maconachie in his report in great detail.

I.—Khádar Bángar	... ...	76 villages.
II.—Bángar	... ...	80 ,,
III.—Dahri Sailábá	... ...	26 ,,
IV.—Zerkohí	... ...	34 ,,
V.—Khandrát	... ...	35 ,,
VI.—Kohí ...	... ...	32 ,,
	Total ...	283 villages.

General facts bearing on the assessment.

The incidence of the revenue of the expired Settlement was, as a rule, distinctively light; and the increase of cultivation afforded an obvious presumption that a considerable increase of revenue was to be expected. This presumption wss strengthened by the facts of the undoubted general development of the country; the improve-

General facts bearing on the assessment.

ment of the roads and communications, especially by the construction of the Mathra road, which opens up the *tahsíl* through its whole length; and the rise in price of agricultural produce. The return of prices shows a rise in price more or less decided in the case of every staple, and there is no doubt whatever that this means, in a considerable degree, a rise in value also. These, then, were the grounds for expecting a large increase in assessment. The countervailing facts were the want of thrift common in many, perhaps most, villages; the poor character of much of the new cultivation; the loss of *dahar* in some parts; and the deterioration of soil, whether by the deposit of sand from the hills, obstruction of drainage by the canal, or the flooding of alluvial land by the Okhlah weir.

Revenue rates.

The new assessment rates are shown below:—

Chak.	Irrigated.		Unirrigated.	
	By wells.	Dahri.	Dakár, Rauslí.	Bhúr.
I.—Khádar Bángar. { Khádar ...	2 12 0	......	1 6 0	0 14 0
I.—Khádar Bángar. { Bángar ...	2 12 0	......	1 6 0	0 12 0
II.—Bángar	3 0 0	......	1 8 0	0 14 0
III.—Dahrí	3 0 0	2 8 0	1 10 0	1 0 0
IV.—Zerkohí	2 12 0	2 8 0	1 6 0	0 12 0
V.—Khandrát	3 8 0	2 4 0	1 10 0	......
VI.—Kohí	2 8 0	2 0 0	1 2 0	0 10 0

Assessment.

The sanctioned revenue rates amounted to Rs. 2,36,646. Mr. Wood's detailed assessments reached Rs. 2,40,360. The total of the actual announcements was accordingly Rs. 2,32,130, that is, Rs. 4,516 below rates. The statement in the margin shows the result of the Assessment Chakwár in the Ballabgarh *tahsíl*.

Chak.	Average demand 1871-72 to 1875-76.	Revenue rates.	Jama as finally assessed.
Khádar Bángar ...	46,233	53,698	50,355
Bángar... ...	79,126	94.598	93,005
Dahrí Sailábá ...	32,592	33.414	33.925
Zerkohí	21,349	21,743	21.840
Khandrát	9,889	13.794	12.540
Kohí	13,123	19,367	16,325
Total of Tahsil ...	2,02.312	2,36,614	2,27,990

Mr. Maconachie writes:—

"Viewed as a whole, the new assessment of the *tahsíl* has raised the Government revenue by Rs. 27,577 or by 13·6 per cent. This includes the assessment of gardens and resumed *máfis*, and allows for reductions in appeal. The presumptions already mentioned, verified and strengthened by the results of minute village to village inspection, appear to warrant the increase taken; and there seems no reason to anticipate anything but a fair measure of prosperity for the *tahsíl* in the future. The chief danger, of course, in a tract where such a considerable portion of the cultivation depends on rain, must always be drought, and this would be felt severely in several parts. The Kohí villages, lying high and dry, and the less protected villages in the Bángar, would be the first injured; and if the want of rain continued, the weaker villages throughout the *tahsíl* would

Chapter V, B.

Land and Land Revenue.

Assessment circles of Delhi *tahsíl.*

feel it. But unless this calamity occurs to a marked degree, there should be no difficulty in collecting the revenue."

Some changes were made in the number of villages in Delhi *tahsíl* during Settlement, which are detailed in Chapter II. The number of villages now is 288, divided into the following assessment circles:—

I.—Khádar Bángar	43 villages.
II.—Bángar	98 "
III.—Dahrí Sailábá	78 "
IV.—Zerkohí	30 "
V.—Khandrát	17 "
VI.—Kohí	22 "
TOTAL	288 villages.

The area of the *tahsíl* is 425 square miles, and the greatest length and breadth are nearly equal at 25 miles, the average length 22 and breadth 19. A minute description of the several circles will be found in the Settlement Report.

Revenue rates.

The rates sanctioned for the several circles were as follows:—

	IRRIGATED.		UNIRRIGATED.	
	By well.	Dahrí.	Dakar, Rausli.	Bhúr.
	Rs. As. P.	Rs. As. P.	Rs. As. P.	Rs. As. P.
Khádar	} 3 4 0	1 14 0	1 8 0	0 14 0
Bángar				
Bángar	3 0 0	2 0 0	1 8 0	0 12 0
Dahrí	3 0 0	2 8 0	1 6 0	0 12 0
Zerkohí	2 12 0	2 2 0	1 2 0	0 12 0
Kohí	2 4 0	2 0 0	0 15 0	0 10 0
Khandrát	4 0 0	2 0 0	1 12 0	1 0 0

Assessment.

The results of the application of the rates are given below, together with the produce estimate, and the actual *jama* obtained by working out the detailed assessments :—

CHAK.	Average of five years 1872-73—76-77.	Produce estimates.	Jama at Commissioner's rates.	Jama at sanctioned rates.	Jama announced.
	Rs.	Rs.	Rs.	Rs.	Rs.
Khádar Bángar	23,834	26,927	19.584	19,357*	20,871*
Bángar	1,63,562	1.43.089	1,58.550	1,19,054*	1,17.756*
Dahrí	89,477	1,14.284	94.813	90.570*	87.825*
Zerkohí	22,114	25.468	25,002	25.025	25,270
Kohí	11,322	14,357	13.338	13,327	13,120
Khandrát	8,237	12,402	13,150	11.6'2	10,550
TOTAL ...	3,18,546	3,36,421	3,24,437	2,78,945	2,75,392†

* That is at dry rates, not including owner's rate as in the old *jama*. The last ten year's average gives Rs. 48,158 for owner's rate for the *tahsíl*. The amount of ultimate *jama* is Rs. 2,76,324; the initial *jama* is Rs. 2,75,552, allowing Rs. 772 as deferred revenue on protective leases. This is reconciled with the amount shown here by making the following allowances:—Add to that amount Rs. 1,076 for

Fluctuating assessment in Jhíl *chak* in *chak* Dábar.

A special feature of the assessment in this *tahsíl* was the formation of a *chak* Jhíl as already done in the neighbouring *tahsíl* of Gurgáon. Five villages lying lowest in the Najafgarh *jhíl* were divided into two *chaks*, *chak* Jhíl and *chak* Mustakil. The latter only has in each case been assessed regularly. The arrangement for the *chak* Jhíl is that the land will be assessed only when cultivated at rates varying with the crop as follows :—

Sugarcane, Rs. 6 per acre per annum to be taken only if the crop ripens.

Melons and *rabi jawár*, Rs. 1-8 per acre per crop.

All other crops, Rs. 3 per acre per crop.

The cesses also are levied on the amounts thus due. These are the same rates as those used in Gurgáon. The system is popular. The villages were all suffering from over-assessment, or rather from inelasticity of assessment; and the relief given by adopting the new method was urgently required. The areas in each village of the *chak* Jhíl are given below :—

Name of Village.	Total area.	Minhai.		Malguzari Land.							
				Uncultivated.		Cultivated.					
		Lakhiraj.	Barren.	Cultivable waste.	Lately abandoned.	Artificially irrigated.	Naturally irrigated.	Unirrigated.	Total.	Gardens and Groves.	Total Malguzari land.
Bahlolpur Dábar ...	561	...	24	7	...	...	530	...	530	...	537
Páotah ...	242	...	...	10	8	...	224	...	224	...	242
Zainpur ...	149	...	1	48	3	...	97	...	97	...	148
Shikárpur ...	679	...	5	100	...	...	574	...	574	...	674
Guman Herí. ...	521	...	4	230	...	...	287	...	287	...	517
Total ...	2,152	...	34	395	11	...	1,712	...	1,712	...	2,118

Assessment circles in the Sunipat *tahsíl*.

There are only two *chaks* in this *tahsíl*, and their long boundary is for the most part easily defined. The Bángar lies to the west of the old bed of the Jamná, in the same way as the Khádar lies immediately west of the present bed. A great part of the Khádar, as before noticed, has probably been at different times under the flood or flow of the river, and the soil is generally more sandy than the Bángar; but there is an easily traced boundary running almost due north and south through the *tahsíl*, where the Bángar begins with a rise, more or less sharp, to the west. For about half way

gardens separately assessed, and Rs. 246 for resumed *máfis*, and deduct Rs. 390 on account of land taken up for public purposes and the Rs. 772 above mentioned for wells = Rs. 2,75,552.

† In comparing the present with the former *jama* it must be remembered that assessments have not been announced on three villages, Audhaolí, Karthwara and Khandrát Kalán, as being under direct lease from the district. These *jamas* may be put down as Rs. 25, Rs. 214 and Rs. 2,550 respectively; total Rs. 2,789. This brings the announced *jama* very near indeed to the *jama* at sanctioned rates; only Rs. 764 difference.

Chapter V, B.

Land and Land Revenue.

up from the south this boundary lies very near the line of the old imperial road; in the upper half it lies more to the west of that line. The Khádar has 110 villages, the Bángar, 129. Real, but more minute, differences may be shown by drawing irregular lines from north to south beginning at the east, and these variations are fully described in Mr. Maconachie's Settlement Report.

Development since Regular Settlement.

Since Settlement there has been a noticeable increase of barren in the Bángar *chak* from 20,144 acres to 22,687, and the latter figures are far below the truth. A still more serious point is that a considerable proportion of this waste is new, that is to say, the land now under cultivation was much of it formerly uncultivated, and sometimes considered unculturable. In place of this, land has fallen out of cultivation, as really barren through *shor*. So that the character of the soil available for expansion of cultivation has deteriorated, and is deteriorating more than might be imagined from the area statistics. The increase in the Khádar cultivated area would seem to have been made pretty equally from the "culturable" and the "unculturable" land. If not, a large extent of the formerly so-called "unculturable" has now been put down as "culturable." Probably both of these changes have taken place. The changes in cultivation and in irrigation may be summarised as follows:—

	Cultivated.	Uncultivated culturable.	Uncultivated unculturable.	Irrigated.
Bángar ...	-17 (01 per cent.)	-2.040 (7·4 per cent.]	+2,543 (12 per cent.)	-4,653 (34 per cent.)
Khádar ...	+19,642 (38 per cent.)	-9,412 (19 per cent.)	-8,228 (40 per cent.)	-455 (1 per cent.)

The irrigated area does not include the canal irrigation, so that the falling off in the Bángar is not strange. The figures of the Khádar area are misleading. There has been no doubt an increase in the permanent means of irrigation; the mode of calculation must have been different; 1,509 new *pakka* wells have been sunk here. In the canal area there is a decrease of 13,495 acres, but this too is at least partly nominal. The last figures are those of the year of measurement, when irrigation was under the average. The annual average for thirty years is 54,354 acres.

The markets for Sunipat produce are, and indeed for a long period have been, good. The great population of Delhi is a valuable oulet for all kinds of grain and pulse, while Mirath on the other side of the Jamná takes a great deal of sugarcane, the most valuable of all crops. The general expansion of population has improved the market, and the same may be said of the improvements in road communications. There is the Grand Trunk Road, an inestimable boon for the heavy traffic, and the cross roads, though far enough from being what they ought to be, are considerably better than they were in 1842. Prices too have risen, and this rise is to some extent one in value as well as in price. In some crops the rising tendency has been uniform, as in the case of the important staples, sugarcane and wheat, gram, maize and *bájra*. For others the highest price was reached in the quinquennial period 1864 to 1869, which included the famine year 1868. It is not likely that the staples will fall to their old prices. Especially favourable

to the *zamindárs* is the estimate of 34 *sérs* per rupee for gram, adopted for purposes of assessment. It is not rash perhaps to say that this rate will never again be seen in Delhi. The increase of population has been large.

Chapter V, B.

Land and Land Revenue.

Revenue rates.

The statement in the margin shows the rates used in the assessment of the Sunipat *tahsil*.

Soil.	Rate per acre in rupees.	
	Khádar.	Bángar.
Irrigated ...	2·12	3·0
Dry Dákar, Rauslí ...	1·6	1·8
,, Bhúr ...	0·12	0·14

Assessment of canal land. Owner's rates.

Mr. Maconachie thus discusses the owner's rates system :—

"The third difficulty in assessing this circle is that the land is to be treated in its *báráni* or rather (for I think there is a difference in the terms) in its '*unirrigated aspect*.' This expression may mean either of two things : (1st,) land considered as not only unirrigated, but as never having been irrigated. This is the only sense in which it can be accurately called *báráni*, and it is equivalent rather to 'unirrigable' than 'unirrigated,' though there is to be sure the possibility of canal irrigation being extended to it in the future. The words, however, as applied to land habitually irrigated by a canal, and considered with regard to the general tenor of the Government instructions on canal assessment in this district, seem to me likely to mislead. For us a more honest meaning of the words is : The state of the ground as it would be if, other physical features remaining the same, the irrigation of that particular piece of ground were taken away. As compared with the first meaning there are differences here : there is the actual amelioration of the soil produced by the valuable silt deposit of the canal water, together with the decayed vegetable matter usually found on canal land. There is also the percolation certainly to be expected from adjacent fields in which, from the hypothesis, irrigation will be going on. Thirdly, there is the humidity available from the evaporation going on in the ponds and distributaries, and the canal itself ; for, as noted above, all these things remain. If these differences that I have just noted exist, there ought to be a special rate for land habitually irrigated, but for the nonce left unirrigated. If nothing else were considered, there is at least the improvement of the soil which often takes place under healthy canal irrigation. Part of its transient benefits have as a fact become permanent, and it is only fair to represent those advantages in the rates assessed on the 'unirrigated aspect.' Beside the rate on the 'unirrigated aspect,' of canal land, the only complement available to make up a full assessment is the 'owner's rate.' This has been fixed at one-half of the 'occupier's rate,' and the latter may be taken without chance of any material error as averaging nearly Rs. 3 per acre. The 'unirrigated aspect' rate, therefore, will, for each village, be its full (wet) assessment, minus about Rs 1-8 per acre of canal irrigation. This is what I have aimed at securing, and in doing so the 'dry' assessments of not a few villages stand at a figure which, without considering these points, might seem too high."

Results of assessment in the *tahsil*.

The statement on the top of next page shows the result of assessment in both *chaks* of the *tahsíl*, and the general total resulting therefrom.

The ultimate *jama* is Rs. 3,38,267, the initial *jama* is Rs. 3,37,870, allowing Rs. 397 on protective leases. To reconcile that with this amount, we must add Rs. 1,767 assessed on gardens to this Rs. 3,36,500 and deduct the Rs. 397 = Rs. 3,37,870.

Mr. Maconachie thus discusses his assessments :—

Comparison of old and new *jamas*.

"The comparison of the new with the old assessment must, of course, take account of the element of uncertainty, introduced by the new method

Chapter V, B.

Land and Land Revenue.

Results of assessment in the *tahsil*.

CHAK.	Average of 5 years' demand, 1872-73—1876-77.	Jama at sanctioned rates.	Jama announced, *i.e.*, dry rates on canal.	Owner's rate based on 10 years' average irrigation.	Gross estimated assessment.
Khádar ...	1 24.043	1.45.930	1,41 815	...	1.41,815
Bángar ..	2,77,265	1.81,982	1,94.685	74.504	2.69.189
Total of tahsíl ...	4,01,308	3,27,912	3,36,500	74,504	4.11,004

Comparison of old and new *jamas*.

of separating the owner's rate from the land-revenue. If it could be supposed that the average irrigation of the last ten years will be maintained under the new system, the result of the revision of assessment in this *tahsíl* would be an increase on the whole of Rs. 11,463. But this supposition is not likely to become fact, and it would be a calamity for the *zamíndárs* and (therefore) eventually for Government if it did. This point is, I believe, agreed upon by all departments, and has indeed been recognised officially in the Government proceedings, which called for opinions as to the best way of restricting irrigation in the canal villages. My opinion then was and still is that the change in method of assessment will of itself induce the *zamíndárs* to take less water, and that till it is seen how far they are influenced thus it would be premature to take other steps. Should it prove to be the case that the agriculturist finds it pay him now to take much less water than hitherto, even under the condition of a decrease in the production of his estate, then it seems to me the old assessment stands self-condemned, for it is shown that a forced and exhausting system of agriculture has been pursued as necessary to make possible, though only temporarily possible, the payment of the Government revenue. And I have, as said before, little doubt that, in a considerable degree, this will happen. I expect that for a few years there will be a large decrease in the yearly area of canal irrigation. Then there will be a kind of re-action and more water will be asked for. I do not advise that all the requests of the *zamindárs* then be granted ; but I do hope that the Irrigation Department will be able to bear the strain which a recurrence to irrigation under such circumstances might put on their arrangements in other parts for the supply of water. I sincerely hope that the mere fact of having once given up water will not of itself be considered a sufficient reason for refusing it altogether afterwards. The matter is of extreme importance : it is perhaps the turning point which will decide the question of prosperity or the reverse for the great body of canal villages throughout the district.

Villages assessed at more than a "true dry rates assessment."

"In his Settlement Secretary's No. $\frac{8}{3937}$ of 7th June 1880, the Financial Commissioner called for a list of those villages, which from the high rate of the incidence of their new assessment, might be thought to be rated at more than a true dry rates *jama*. A list was also called for of the villages which, owing to exceptional and (it is to be hoped) temporary swamping and bad drainage, are now rated at something less than a true dry assessment. For the latter it will be provided that revision of the *jama* if necessary in the interests of Government shall take place after periods of five years. In my reply to this I stated that in the Delhi *tahsíl* no villages need be noticed prominently in this way as being assessed at higher than a true dry rate : there are some indeed near Delhi, such as Azádpur, Nimri, &c., with a high rate of incidence, but I think it almost certain that if canal irrigation were decisively diminished they would sink wells, and if they did they would probably be as well off as at present.

"For Sunipat I mentioned four villages, Ahulána, Balli Kutbpur, Pughthalla and Mohana as partially dependent on canal irrigation for their

ability to support the high assessment put on them; but I noted that they all could probably do with less water than they at present have, and that, before entering on any question of reduction of revenue as necessary on restriction of irrigation, it should be ascertained whether wells could not be sunk, and that if they could, little or no reduction could be necessary.

Chapter V, B.

Land and Land Revenue.

Villages assessed under a "true dry assessment."

"In reply to the enquiry as to villages assessed at something less than a true dry assessment, I submitted a list of twenty villages, one in Delhi and 19 in Sunipat.* But in doing so I laid stress on the fact that the best judges of any future question arising as to revision of assessment would be the District Officers of the time, and that I should deprecate any action which would have the effect of embarrassing their free decision of each case on its merits. This point I urged also with regard to the villages assessed above the true dry rate; and at the same time I should not wish to stop or hinder enquiry into the case of other than those villages mentioned. Taken as suggestions merely, I believe the lists will be useful in a material degree, but they should not be considered as more than this."

Assessment of gardens.

The gardens in some parts of the district are numerous and very profitable. There has been, therefore, no necessity to observe the same liberal indulgence which has been exercised in this matter in the more arid tracts of Gurgáon. As a rule, the Delhi gardens have been assessed, and statement below shows what a considerable sum of revenue is thus obtained. In number they are as follows:—"In Delhi 359; in Ballabgarh 177; in Sunipat 737. Registers have been prepared *tahsílwár* showing the extent, ownership, numbers and kinds of trees and assessment levied in each case. The gardens on which no revenue has been assessed are 52; the reasons for making the exception have been noted in the register.

Tahsil.	Less than 1 bigah.	Less than 5 bigahs.	Less than 10 bigahs.	Less than 20 bigahs.	Over 20 bigahs.	Total.
Ballabgarh ...	38	93	30	12	4	177
Delhi ...	71	182	56	34	16	359
Sunipat ...	325	340	53	18	1	737
Whole district ...	434	615	139	64	21	1,273

The extent of all the gardens is 2,665 acres, assessed at Rs. 4,684.

Protective leases on wells.

Protective leases on wells newly made or repaired were given under the provisions of B. C. VII of 1866 in 98 cases. In Delhi 36; Sunipat 13; Ballabgarh 49. A table in the Settlement Report shows the total amount and the details of the revenue which Government, in order to protect capital from being taxed, has for the time surrendered; the land covered by the wells there treated is 902 acres.

The results of the new assessment.

It remains to show in a tabulated form the results of the new assessment for the whole district. In doing so the owner's rate is

* The Sunipat villages were:—Anandpur, Chitána, Chatia Dewa, Jájí—Jahmalpur or Lohan Tibba, Juan, Jharaut, Jharauti, Khubrú.. Kascorí, Koaltí, Kheu Dahya, Mahipur, Nirthán, Rahimáva Salempur Turali, Saidpur, Thána Khurd, and Thana Kalan: the Delhi village was Holambi Kalán.

Chapter V, B.

Land and Land Revenue.

The results of the new assessments.

taken at the estimate formed from the average of the past ten years, but the actual amount may be expected to be considerably less, owing to the restriction of irrigation which it is to be hoped the people will themselves bring about, and which the new assessment was intended to encourage. This statement includes the assessments of gardens and resumed *máfis,* and the like; the amount here shown is, in fact, the full ultimate demand for the new assessment, except as regards the owner's rate.

Statement showing the results of revision of land revenue assessment in Delhi during the recently concluded Settlement.

Assessment Circle.	Old *jama* average demand of the last* five years of expired settlement.	Revenue rates on revised measurements.	*Jama* announced.	*Jama as* reduced in appeal and review, and increased by assessment of gardens and resumed *máfis,* &c.	Estimated owner's rate.	Estimated total.	Estimated increase of demand.
Ballabgarh Tahsil.							
Khádar Bángar ...	46.233	53 698	50,805	50,715	.. ...	50,715	+4 482
Bángar	79,126	94.598	94,310	93,903	......	93.903	+14.777
Dahri Sailába	32,592	33.414	34,025	34.145	......	34,145	+1,553
Zerkohí	21.349	21.743	22,350	22,079	......	22,079	+730
Kohi	13.123	19 367	17.965	16,403	......	16.403	+3.280
Khandrát	9,889	13,794	12.675	12.644	......	12,644	+2,755
Total ...	2,02,312	2,36.614	2,32,130	2,29,889	......	2,29.889	+27,577
Delhi Tahsil.							
Khádar Bángar ...	23.834	19.357	20,871	20.898	58	20.956	—2,878
Bángar	1 63.562	1,19,054	1,17.805	1,18.427	47.886	1,66.313	+2.751
Dábar	89,477	99.570	87.825	87.868	214	88.082	—1 395
Zerkohí	22,114	25.025	25.290	25,298	......	25.298	+3,184
Kohí	11.322	13,327	13,120	13,132	......	13,132	+1,810
Khandrát	8,237	11,612	10,560	10,701	......	10,701	+2,464
Total ...	3,18,546	2.78,915	2,75,471	†2.76,324	48,158	3,24,482	+5,936
Sunipat Tahsil.							
Bángar	2,77.265	1,81.982	1,94 685	1.95.548	74,504	2.70,052	—7,213
Khádar	1,24 043	1,45.930	1,41,815	1,42,719	......	1,42.719	+18.676
Total ...	4,01,308	3.27,912	3,36.500	3.38.267	74,504	4,12,771	+11,463
Grand Toatal ...	9,22,166	8,43,471	8,44,101	†8.44,480	1 22.662	9.67,142	+44,976

The kistbandi amount.

The amount entered in the district *kistbandí,* after deductions on account of *ináms* to *zaildárs* and *alá lambardárs,* is Rs. 8,26,735

* For Ballabgarh 1871-72—1875-76.
For Delhi ... } 1872-73—1876-77.
For Sunipat... }

† And adding Rs. 2.789 for three villages held in lease we get Rs. 2,79,113 and Rs. 8,47,269 respectively as the *jamas* here.

The *kistbandi* amount.

which will be reconciled with the *jama* by making the following deductions from the latter:—

				Rs.
Zaildárs' allowances	...	...	...	8,472
Alá lambardárs	...	...	...	5,747
Protective leases	...	..	...	1,957
Progressive *jamas*	...	...	...	1,269
Inám to *zamíndárs*	...	...	...	300
	Total deductions		...	17,745
				8,26,735
				8,44,480

The instalments.

The division of the yearly amount due as revenue into the two instalments of *rabi* and *kharíf* was generally determined by the choice of the people themselves; but, as a rule, no village was allowed to pay less than four annas or more than twelve annas in either harvest. As a rule, the old proportions were generally maintained, and in some of the cases in which change was made, the alteration was palpably for the better.

Cesses.

Cesses to be levied are those in ordinary use, including the *lambardári* Rs. 5, local rates Rs. 8-5-4, *dák* 8 annas, school Re. 1, road Re. 1, and *patwárís* as follows: Ballabgarh 4½, Delhi 4¼, Sunipát 4 per cent. Cesses are levied on owner's rate. Under the new *patwárí* arrangements the full rate will be enjoyed by the *patwárí* only on measurements yielding up to Rs. 500 owner's rate. On measurements above this limit up to Rs. 1,000 he will get Rs. 2 per cent., while in measurements for more than Rs. 1,000 owner's rate he will get only 1 per cent. *Jágírs* have according to rule been assessed for the levy of cesses.

Assessment of di-alluvion.

Before the recent Settlement the old rule was in force, by which no alterations due to river action were considered, unless they amounted to 10 per cent. of the culturable area of the village. This system worked great injustice, as the whole holding of an individual might be cast away, without his being able to obtain relief. Accordingly, in 1876 the new system was introduced, under which each case of di-alluvion is separately considered and dealt with on its merits. For revenue purposes the deep stream boundary is the general rule of decision.

Assignments of land-revenue.

Table No. XXX shows the number of villages, parts of villages, and plots, and the area of land of which the revenue is assigned, the amount of that revenue, the period of assignment, and the number of assignees for each *tahsíl* as the figures stood in 1881-82. The *máfi* investigations in the recent Settlement were important and protracted. The authority under which the enquiry was made is the letter No. 7481 of 29th October 1872, from the Secretary to Financial Commissioner, to Commissioner, Delhi. From this letter the following extracts are important, as regards the procedure to be adopted:—

(i).—All grants which can be shown to have been included in the registers of land released in perpetuity which were maintained before the Mutiny, either by the existence of

Chapter V, B.

Land and Land Revenue.

Assignments of land-revenue.

authentic copies of those registers, or by the production of the certificates furnished to the holders, must be regarded in the absence of any express limitation by the terms of the grant, as hereditary and transferable. In these cases you will only have to ascertain that the present possession corresponds with the extent of the grant, and that the present holder can show a good title derived from the person whose name was originally entered in the register.

(ii).—Life-grants were to be considered as non-transferable, and persons in wrongful possession were to be ousted, unless for any reason it should seem fit to make recommendation to the contrary.

(iii).—In the case of grants under 10 *bighas* for religious or charitable purposes, included in the separate register of such grants, it will be necessary only to ascertain that the grants are still applied to such purposes, and that the area entered in the register is not exceeded.

(iv).—Perpetual grants after 1858 were to be considered as not transferable, those made before the Mutiny as transferable.

With regard to the kind of *máfi* known as *half-rates* tenures, the instructions were to resume them ordinarily, unless for special reasons it seemed fit to recommend a continuance of the grant in the shape of a *máfi* on part of the land in question. These concessions have almost uniformly been found to require no further continuance, and having come to the natural term of their grant *viz.*, the end of the current Settlement, have been resumed; the area affected being put in with the *khálsa* area and assessed at full rates.

Statement showing *máfis* in Delhi.

The results of the *máfi* investigations are shown in the table on the next page. The grants made for good service in the mutiny are separately detailed in the Settlement Report. The aggregate amount of assigned, revenue in the Delhi district is now Rs. 53,189.

Government lands, forests, &c.

Table No. XVII shows the area and income of Government estates; while Table No. XIX shows the area of land acquired by Government for public purposes. Government right, in the 99 villages in which it is sole or part proprietor, extends to 31,381 acres, of which 20,272 are assessable, and on which Rs. 25,540 is the estimated revenue. The property, therefore, is of very considerable importance. Its origin is confiscation at the Mutiny, of the private property of the king, of lands of *máfidár* proprietors grossly mutinous, and of the property of the Rájá of Ballabgarh and of the Nawáb of Jhajjar.

Taiúl.

The private property of the king is called *taiúl.* The word is said to be derived from the Turkish, and to mean 'pocket', and may therefore be freely rendered as pocket money, or in a certain sense the *peculium* of the king. This property he acquired largely under the arrangements for his maintenance and privy purse in 1803, but there is reason to beleive that the Mughal Emperors always had private land held in direct property. After confiscation at the Mutiny, it appears from the records of the Government office that protracted

Chapter V, B.
Land and Land Revenue.
Statement showing *máfis* in Delhi.

Abstract of the Máfi Registers, Delhi District.

No.	Nature of the Mafi.	Of land not assessable, as being barren, &c.				Assessable at less than Rs. 5.				More than Rs. 5, and less than Rs. 10.				More than Rs. 10, and less than Rs. 20.				More than Rs. 20, and less than Rs. 50.				More than Rs. 50, and less than Rs. 100.				More than Rs. 100.				Grand Total.
		Delhi.	Ballabgarh.	Sunipat.	Total.	Delhi.	Ballabgarh.	Sunipat.	Total.	Delhi.	Ballabgarh.	Sunipat.	Total.	Delhi.	Ballabgarh.	Sunipat.	Total.	Delhi.	Ballabgarh.	Sunipat.	Total.	Delhi.	Ballabgarh.	Sunipat.	T tal.	Delhi.	Ballabgarh.	Sunipat.	Total.	
1	Perpetual and transferable ...	34	1	...	35	165	14	2	181	101	19	...	120	89	12	...	101	30	5	1	36	8	3	2	13	6	7	5	18	504
2	Perpetual, but not transferable ...	...	...	...	...	...	...	...	...	...	...	...	...	3	...	...	3	3	1	2	6	3	4	...	7	...	6	2	8	24
3	For life or lives (specified) ...	...	2	...	2	3	57	...	60	2	31	...	33	4	22	...	26	8	24	...	32	3	4	...	7	2	5	...	7	167
4	During existence of groves, or buildings connected with the *máfis*, more than 10 acres ...	...	...	...	...	...	1	...	1	2	1	...	3	10	20	1	31	20	19	1	40	6	2	1	9	3	3	...	6	90
5	Do., less than 10 acres	...	...	...	...	10	43	3	56	26	22	6	54	23	2	2	27	12	...	...	12	...	...	...	...	1	...	...	1	150
6	As *ináms* ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	...	2	2
7	For planting groves	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	TOTAL ...	34	3	...	37	178	115	5	298	131	73	6	210	129	56	3	188	73	49	4	126	20	13	3	36	13	22	7	42	937

Chapter V, B.
Land and Land Revenue.
Taiúl.

enquiry was made as to its value and extent. In his No. 521 of 17th December 1858, the Deputy Commissioner requested instructions on the point whether a title was to be held good, claiming 'freehold tenure' of *taiúl* property 'by right of gift or purchase from the ex-king or his immediate predecessors.' He also reported resumption of crown lands held under 'deeds granted by persons manifestly incompetent to alienate.' The Commissioner replied that as a rule all grants or sales made subsequent to 1803, when Sháh Alam became pensioner of Government, were valid only during the life of the donor. He quoted among other authorities a rule of 1841 to this effect laid down by the Lieutenant-Governor of the North-West Provinces, and confirmed in the same year by the Supreme Government. This view was sanctioned by Secretary to Government's, No. 579 of 26th May 1859, and directions were given for the preparation of a register of *taiúl* property. This register was submitted (nearly nine years later) by the Deputy Commissioner (Mr. Fitzpatrick) under cover of his No. 144 of 15th April 1868. The Commissioner, in sending it up to Government, remarked that in some cases of sale, Rai Bansi Lál, Extra Assistant Commissioner, acting on the revenue side, had held that *all* rights were sold, *i.e.*, *máfi*, as well as proprietary rights, that these decisions not being judicial orders might be contested by Government if necessary, but that he considered this unadvisable. The Secretary to Government, in his No. 361 of 11th May 1868, concurred in this. When the register came down a mistake was made as to the terms of Government orders, and sales were made of a few properties, which, on report for sanction being made, were disallowed by Government and cancelled. Systematic enquiry was directed by an Assistant Commissioner of the district 'who was to summon parties claiming against Government to file proofs of their title, and then to draw up draft plaints for the opinion of the Government advocate.' On this the point of law was referred as to the time of limitation running against Government, in suits to set aside alienations by the king of Delhi of proprietary right in *taiúl* villages. The Government advocate held that this was 60 years from the date of confiscation of the grant to the king, *i.e.*, from 1857. After further correspondence on points of detail, the Financial Commissioner in his No. 6,598 of 16th September 1872, laid down the principles of investigation, making a division between urban and rural *taiúl*. For the former a special agency was appointed (Mr. G. L. Smith, Assistant Commissioner, who made his report in May 1876,) and the enquiry into rural *taiúl*, which included all cases save those properties inside the City of Delhi and the suburbs of Jehannuma and Khandrát kalán, in the towns of Indarpat, Farídábád and Ballabgarh, was made over to the Settlement Department to be carried on in connection with the investigation into *máfi* tenures. Distinction was drawn between :—

(1.)—The title of Government to proprietary right.
(2.)—The right of occupants to hold revenue free.

And it was remarked that these rights were wholly independent of each other. *Máfis* might exist on Government property,

Taiúl.

and on the other hand occupants not admitting Government proprietary right would still have to prove any alleged right to hold revenue free. The Financial Commissioner further directed "that the proprietary right of Government should be asserted in each case and recorded in the Settlement papers, that a suitable rent should be fixed by the Settlement Officer, and that cases on which the right of Government is not admitted should be reported to the Deputy Commissioner, who should be instructed to eject the holders if there is good ground to believe the Government title to be a good one. The proprietary right of Government should be asserted whether the land is held revenue free or not, and a rent demanded as acknowledgment of the right." The report on proprietary right was to be kept distinct from that on *máfi* tenures, while distinct mention was to be made in the latter register as to whether the property belonged to Government or not. The investigations are not yet complete.

Ballabgarh villages belonging to Government.

The Rájá of Ballabgarh had proprietary right in the whole or in part of 34 villages in his territory ; and, at the Mutiny, these were confiscated, and settled with the *zamíndárs* with the addition of a moderate *malikáná*, generally about 10 per cent. on the revenue. In 1872 when Settlement proceedings began, Mohammad Ali Sháh, of Sardhána, petitioned to be allowed to purchase Government rights in these villages, offering Rs. 1,47,680 as the price. Government sent down for report: (1). Whether the Government title was good. (2). Whether there was much culturable land as yet uncultivated. (3). Whether the price offered was fair. The reply to this stated that the Government title was undoubted ; that, so far as known then, the extent of *málguzárí* land would be as follows :—irrigated 2,000 acres ; unirrigated 11,000 ; culturable 2,000 ; total 15,000 acres. Mr. Wood further estimated the value of the property at not less than Rs. 2,40,000. He suggested, however, that before sale, the rights of the tenants cultivating on the property should be ascertained, as many of them, though not laying claim to ownership, were probably entitled to rights of occupancy. This enquiry was directed under No. 469 of 16th March 1874, from the Secretary to Punjab Government to the Financial Commissioner, with the following principles laid down to guide the investigation :—

Orders for enquiry into tenant rights.

(1)—The British Government succeeds to the rights, and only to the rights of the Ballabgarh Rájá.

(2)—Any cultivator who has been in continuous occupation, either in his own person, or in the person of his ancestors, for 12 years before annexation, should be admitted to rights of occupancy. This implies a modification of the Financial Commissioner's proposal, that those who have since the mutinies only, or only in their own persons and those of their fathers, resided in the village, should be entered as having no right of occupancy.

(3)—Questions of the right of absentee *máfidárs* are reserved for decision as they come up.

(4)—The *onus probandi* lies rather on Government than on a cultivator of any length of standing.

Chapter V, B.

Land and Land Revenue.

Eight of the thirty-four villages belonged entirely to Government, and of the twenty-six remaining, eight had the Government rights already separate and distinct from those of the *zamíndárs*; in seventeen they were as yet joint with the *zamíndárs*; and in one the rights were partly separate and partly joint.

Reports on the tenant right.

The report on the separately held villages, and such part of Garhkhera as was already separate, was sent up under Settlement Officer's No. 267 of September 14th 1876, and orders were passed in Government letter No. 578 of 17th May 1877. The main points were—

1.—Rights of occupancy were conceded in 8,846 cases.

Ditto ditto	refused in	851	"
Ditto ditto	remained undecided in	36	"

2—Where rights of occupancy now granted affect absentee *máfidárs*, no such *máfidárs* should be allowed to contest such rights,

3.—The right now granted is under section 8 of the Tenancy Act; any parties claiming under section 5 can sue to establish the right.

With regard to the sale of the property, it was directed that *(a)* it should be made in portions or lots, not in a lump, and after reserving any lands necessary for grants; *(b)* the cultivators should ordinarily be allowed an opportunity of offering for the land sold. The report on the remaining villages, after partition had been made, was submitted in Mr. Maconachie's No. 292 of September 18th, 1879, and on this orders have not been passed. His proposals were to concede occupancy right in 839 *bighas*, 13 *biswás*, and refuse it in 3,530 *bighas*, 6 *biswás*.

Sale of four villages.

In 1878, four of the villages reported on by Mr. Wood were sold by auction. This was to raise money to pay Rai Bahádur Umrao Singh for the Fattehpuri Mosque property, which by the orders of His Excellency the Viceroy (Lord Lytton) was restored to the Muhammadan community of Delhi. The order for these sales was communicated under cover of the Punjab Government No. 1,189 of 28th August 1878, and at the auction held in pursuance thereof the prices obtained were, for Ballabgarh Rs. 64,500 sold to Ráni Kishen Kaur of the Rájás family.

Chandaolí	Rs. 30,000	sold to Amjad Ali of Farídábád.
Chirsí	" 10,100	
Tilaurí Bángar	" 8,000	

The sum required was Rs. 1,17,833-6, and the difference was met by appropriating a sum of Rs. 6,000 in deposit from the rent of the shops round the mosque. The surplus was given to the trustees of the building.

CHAPTER VI.

TOWNS, MUNICIPALITIES AND CANTONMENTS.

Chapter VI.

Towns, Municipalities and Cantonments.

General statistics of towns.

At the Census of 1881, all places possessing more than 5,000 inhabitants, all municipalities, and all head-quarters of districts and military posts were classed as towns. Under this rule the following places were returned as the towns of the district :—

Tahsíl.	Town.	Persons.	Males.	Females
Delhi	Delhi	173,393	93,165	80,228
	Najafgarh	3,999	2,049	1,950
Sunipat	Sunipat	13,077	6,449	6,628
Ballabgarh	Farídábád	7,427	3,804	3,623
	Ballabgarh...	5,821	3,114	2,707
	Total	203,717	108,581	95,136

The distribution by religion of the population of these towns, and the number of houses in each, are shown in Table No. XLIII, while further particulars will be found in the Census Report in Table XIX and its appendix, and Table XX. The remainder of this chapter consists of a detailed description of each town, with a brief notice of its history, the increase and decrease of its population, its commerce, manufactures, municipal government, institutions, and public buildings ; and statistics of births and deaths, trade and manufactures, wherever figures are available.

Delhi city. Description.

The modern city of Delhi lies in north latitude 28° 39' 40″ and east longitude 77° 17′ 45″ and contains a population of 173,393 souls. It is built on a slight eminence on the right bank of the Jamná, on which it abuts, and as it at present stands was erected in the reign of the Emperor Sháh Jehán, who commenced the work in the year 1648 A.D. It was officially named after him Sháh Jehánábád. It is enclosed on three sides by a high wall of solid stone, the work of the Emperor Sháh Jehán, but further strengthened by the English at the beginning of the present century with a ditch and *glacis*. Towards the east the city extends to the edge of the high bank which bounds the river bed. Here there is no wall properly so called, except for a short distance where the high bank sinks ; but the face of the river bank built up, bears from the outside the appearance of an ordinary city wall, though inside the surface is on a level with the summit of the fortifications. In the flood season the river until recently flowed immediately beneath the walls ; but there is now a space left dry of greater or less width according to the season, the river bed having receded a short distance to the east. The circuit of the wall is as nearly as possible 5½ miles. There are in all ten gates, of which the best known are the Kashmír and Mori gates to the north, the Kábul and Lahori gates to the west, the Ajmír and Delhi gates to the south, and the Calcutta

Chapter VI.

—

Towns, Municipalities and Cantonments.

Delhi city. Description.

gate, by which the whole traffic of the Grand Trunk Road passes. The Rájputaná Railway passes out of the city by the Kábul gate, while the Chándni Chauk terminates in the Lahore gate. The eastern wall, abutting on the river, contains no gate of any importance.

The Mughal Palace, now the Fort, lies inside the city, situated in the centre of the eastern or riverside. It is 1½ miles in circuit, and like the city is surrounded on three sides by lofty stone walls, the fourth side being open to the river-bed, which lies at the level of about 40 feet below the inside surface. The Fort is entered by two gates, the Lahori gate to the west leading to the Chándni Chauk, and the Delhi gate to the south, leading to the Faiz bázár, and the Delhi gate of the city. The interior is now almost entirely cleared of buildings, only a few relics of the old Mughal Palaces being allowed to stand. Their place has been taken by barracks for European troops. Outside, towards the city, a space of 300 yards in width has, since the Mutiny, been completely cleared of buildings, which in former days came close up under the Fort walls.

To the south of the Fort, the eastern portion of the city, abutting on the river, and known as Daria Ganj, is occupied by a cantonment* in which are the quarters of a Native Regiment, which, with one wing of a European Regiment, complete the force usually stationed by way of garrison at Delhi.

Outside the Fort, at its north-east corner and only connected with it by a bridge, is the massive fort Salímgarh, erected in the 16th century by Salím Sháh; and at this point the East Indian Railway enters the city by a magnificent bridge across the Jamná. The line passing over Salímgarh, and through a corner of the Fort, runs on to the station inside the walls. The line has lately been continued for the Rajpútána State Railway, and after traversing the city, passes through the wall on the opposite, or north-west side. In the north-east corner of the city, within the walls, and close to the Kashmír gate, lie the Treasury, District Courts, and other offices; while immediately to the south of these lie the Church and the Telegraph and Post offices. Thus, Daria Ganj, the Fort, the public offices and the Railway, form an almost continuous line along the eastern aud northern faces of the city; and the angle between them is occupied by the public gardens. The quarter thus occupied, amounting to nearly half the whole city, presents a comparatively open appearance, and is distinctly marked off and separate from the denser portion lying to the south-west, and occupied by the shops and dwelling-houses of the native population.

A short drive through the Queen's Gardens and across the Railway, leads out by the Kashmír or Mori gate into the Civil Lines. Beyond these, on the north-west side of a city, runs a low line of rocky hills, known as the Ridge, which ends on the banks of the Jamná about a mile above the city, and forms a very prominent object from the surrounding country, and is possessed of great historical interest as the vantage ground from which the English

* Prior to the Mutiny 1857, the cantonment was to the north of the Ridge, about two miles from the city.

Chapter VI.

Towns, Municipalities and Cantonments.

Delhi city. Description.

batteries played upon the city in the siege of 1857. From the summit of this Ridge, the view of the station and city is very picturesque; in the foreground the houses and gardens of the English residents, thickly interspersed with trees, and in the distance the city wall surmounted here and there by tall acacias, while over all rise the minarets of the Jáma Masjid and the Fort. But perhaps the most striking view is that of the eastern face of the Palace, which greets the traveller as he crosses the Jamna Railway bridge on his entrance into the city. Outside the city to the west and north-west lie some considerable suburbs. The largest, that of Sabzi Mandi, lines the Grand Trunk Road on either side for a considerable distance. Less important are the Sadr Bazar and Teliwára. Further south the main suburb is that of Pahár Ganj. The Commissioner's office is situated outside the city, adjoining his private residence, a large castellated house in the Civil Lines known as Ludlow Castle. The cantonments are situated partly inside the fort and partly outside. The European force occupies the fort; and the native force, with their European officers, that portion of the town known as Daryá Ganj between the fort and south wall of the city. In the Civil Lines also, separating them from the Ridge, is a small space known as the cavalry lines, occupied by a troop of native cavalry commanded by a native officer.

The buildings of the town are for the most part of brick, and are well built and substantial. Many of the smaller streets are narrow and tortuous, and end in many cases in *culs-de-sac;* but on the other hand, no city in India has finer streets than the main thoroughfares of Delhi. There are no less than ten main streets, thoroughly metalled, drained, and lighted. The town is traversed by two main thoroughfares, running respectively from east to west, and north to south. The former, known as the Chándni Chauk, is some three-quarters of a mile in length; it leads from the Lahore gate of the fort to that of the city, and is probably one of the finest native streets in India. It is about 50 yards wide, and has a pavement on each side, and one in the middle, planted with a double row of trees, mostly *ním* and *pípal*, with a double road for vehicular traffic. The middle footpath is built over the masonry aqueduct which conducts water from the canal into the fort. The second main road leads from the Kashmir gate on the north to the Dehli gate on the south, passing the district offices, the church, the Delhi College, the dâk bungalow, the telegraph and post offices. It then descends an incline, goes under the railway bridge of the East Indian Railway, and again ascends an incline, crosses the Western Jamna Canal, passes between the Fort and the Jama Masjid, cutting the Chándni Chauk at right angles, and after traversing the Faiz bazár leaves the city at the Delhi gate. Besides those above-mentioned, there are two other broad roads running east and west to the north and south of the railway from the Calcutta to the Kábul gates. These are lined with trees, and give an air of freshness and verdure to the city. The streets are well paved. The drainage and water-supply, however, are not good, but steps are being taken to drain the city, and to supply the inhabitants with good drinking water. The best drinking water

Chapter VI.

Towns, Municipalities and Cantonments.

Delhi city. Description.

is obtained from the Ridge, but that is some distance off, and beyond the reach of the poorer inhabitants of the city.

Quite the finest building within the walls is the Jama Masjid built in the reign of Sháh Jehan (1629-58), and said to have cost Rs. 10,00,000. It is situated on a rocky eminence a little to the south of the Chándni Chauk, and to the east of the open space cleared round the fort, with three entrances approached by broad flights of steps on the south, east, and north sides. The finest entrance is that on the east side; the other two are to a considerable extent confined by adjacent buildings. It is built of red sandstone, and consists of a large quadrangle with the mosque itself on the west side. The mosque itself is of oblong form, 201 feet by 120 feet, and is surmounted by three white marble cupolas with spires of gilded copper. On the north and south sides are two minarets composed of alternate stripes of white marble and red sandstone placed vertically, about 130 feet high, from which extensive views are obtained. Another building of antiquarian interest is the Kála Masjid, near the Turkmán gate, built by Feroz Sháh in 1351. It is now falling into decay, and is mainly of interest as being a remnant of a former city. Inside the fort are to be found some of the finest buildings in Dehli. The Lahore gate of the Fort, built of red sandstone, leads into a "long and lofty vaulted arcade with an octagonal opening at the centre to admit light and ventilation." This is now used as a *bazár* where supplies are sold for the benefit of the European soldiers of the Fort. On emerging from the Lahore Gate the Díwán-i-Aam, or Hall of Public Audience, comes into view. It is a large hall enclosed at the north, but open on the other three sides, and supported by red sandstone pillars. It is now used as a canteen. Further on, close to the river, is the handsomest building in the Fort, known as the Díwán-i-Khás, or Hall of Private Audience. It is a pavilion of white marble, supported on pillars of the same material, the whole of which are, or were, richly ornamented with flowers of inlaid mosaic work of cornelian and other stones. In former times it must have been far more magnificent than at the present time, but it was greatly despoiled after the break-up of the Mughal Empire about the middle of the 18th century. In this building was formerly set up the Peacock Throne, carried away by Nádir Sháh, the Persian conqueror, in 1739 A.D. Close to the Díwán-i-Khás is the Moti Masjid, also of marble, the private mosque of the Emperor and his family, much injured during the Mutiny.

Another building worth mention is the Institute in the Chándni Chauk, a large red brick building, forming three sides of a quadrangle. It is in European style, erected by the Municipal Committee; and is used as a Museum, Town Hall, Darbár Room, and Library for the European residents; and opposite this is the Clock Tower in the centre of the Chándni Chauk, about 130 feet high, with four faces. Other buildings worth a passing notice are the Church, built by Colonel Skinner, the Fattehpurí Masjid, the Delhi College, the Post Office (occupying the building known as the Magazine), the Mor Serai, and the East Indian Railway Station.

There are several fine gardens, both inside and outside the city. The Queen's Gardens, in the centre of the town, between the rail-

Chapter VI.

Towns, Municipalities and Cantonments.

Delhi city. Description.

way and the Chándni Chauk, made by order of Jehanára Begam, the daughter of the Emperor Sháh Jehán, are largely used as a pleasure resort by both natives and Europeans. Beside the gardens proper, there is a well supplied menagerie which attracts large crowds. Besides the Queen's Gardens, the gardens round the Delhi Bank are worth a visit. This house and gardens formerly belonged to the Begam Samru, a celebrated chieftainess, whose husband, a Frenchman of the name of Sombre, was in the service of the Mahrattas. Outside the city, near the Kashmir gate, are the Kudsia Gardens, which owe their origin to Kudsia Begam; and between the Sabzi Mandi and the canal are the Rushanára and Sirhindi Gardens, now forming one large and beautiful garden, including the tomb of Rushanára Begam, another of the daughters of Sháh Jehán, and the favourite sister of the Emperor Aurangzib.

History.

It is not proposed to give a detailed account of the objects of antiquarian and historical interest of Delhi and its environs. The subject has been elaborately dealt with by General Cunningham in his Archæological Reports, I, 132 to 231; IV, i to xvii and 1 to 91; V, 142 to 144; by Mr. Carr Stephen in his Archæology of Delhi; and in the Asiatic Society's Journals, supplementary number of Vol. XXXIII, 1864, page 375; 1866, page 199; 1870, page 70; and there are several guide-books,* which contain every detail which a visitor will care to know. Short descriptions of the most remarkable monuments of antiquity will be given in their appropriate places in the following historical sketch, and a brief notice of some of the most remarkable buildings will be found below; but nothing more will be attempted. The historical sketch itself is merely an attempt to string together, in a readable form, a narration of the most remarkable events in the history of the city. An interesting account of Delhi, as it was in 1823, will be found in Selections from the Asiatic Society's Journal, II, 577. Though possessing no peculiar qualifications from a physical point of view, the neighbourhood of Delhi has, from the earliest dawn of Indian history, been the site of a capital city. Within a distance nowhere exceeding 11 or 12 miles from modern Delhi, city after city has risen upon the ruins of its fallen predecessors, until the *débris* of old buildings has been estimated to cover an area of more than 45 square miles† from Tughlakábád, ten miles to the south, to the Kutb Minár, six miles to the west. First upon this list of cities stands the name of Indraprástha, a city founded, probably during the latter part of the 15th century B.C., by the Aryan colonists of India, when first they began to feel their way down the banks of the Jamna. The Mahábhárata tells us how the five Pándavas, Yudisthira and his brothers, leading a body of Aryans from Hastinápur upon the Ganges, expelled or subdued the savage Nagas, and cleared their land of forest; how they built the city of Indraprástha, and grew into a great Kingdom; and how they fought and overcame

* The best is perhaps that of Mr. H. G. Keen.

† At the northern end the breadth of the ruins is about three miles, at the southern end about six miles. Bishop Heber describes this space as "a very awful scene of desolation."

Chapter VI.

Towns, Municipalities and Cantonments.

History.

their kinsmen, the Kauravas. And then the history loses itself again in the confused chronology of the Puránas.

The city of Indraprástha was built upon the banks of the Jamna, between the more modern Kotila of Fíroz Sháh and Humayún's tomb, about two miles south of the present site of Delhi. The river has now shifted its course more than a mile eastwards, but its ancient bed can still be traced past the site of Indraprástha. The Nigambod Ghát, near the old Calcutta gate of the present city, is believed to have formed a part of the ancient capital; but with this exception, not a stone of it remains standing. Its name, however, is preserved in that of Indrapat, one of the popular names for the small town and Muhammadan fort of Purána Kila, the site of which must be almost identical with that of the ancient city. Yudisthira, according to the Bhágavata Purána, was succeeded on the throne of Indraprástha by 30 generations of the descendants of his brother Arjuna, until at last the line was extinguished by the usurpation of Visarwa, minister of the last King. Visarwa's family retained the sceptre for 500 years, and was succeeded by a dynasty of 15 Gautamas or Gotamavansas, who were in turn followed by a family bearing the name of Mayura.

This brings the history by one rapid stride down to the middle of the first century B.C., the period at which the name of Delhi first makes its appearance. The city too had spread or been removed some miles further to the south, as far as the site now occupied by Kutb-ud-dín's Mosque and the Kutb pillar. General Cunningham would appear to attribute the foundation and name of the new city to a Rájá Dilu, apparently the last of the Mayura dynasty, and identifies it with Ptolemy's Daidalar. The commonest form of the old name is "Dilli." In one place, however, General Cunningham has found it spelt "Dillipur." And there is a tradition extant, which attributes the foundation of the city to Rájá Dillípa, the ancestor in the 5th generation of the Pándava brothers. But this tradition may probably be dismissed as an ignorant invention; for Dilli is universally acknowledged to be of much later date than Indraprástha. The most popular tradition, adopted by Ferishta, and accepted as probably correct by General Cunningham, is that which attributes the city to Rájá Dilu or Dhilu. Dhilu appears to have been the last of his dynasty, and to have been overthrown by a King of the Scythian dynasty, known as that of the Su or Sakas. The Saka conqueror, whose name is variously given as Sukwanti, Sukdat, and Sakáditya, was himself overthrown a few years later by the famous Vikramáditya, the date of whose accession, B.C. 57, is the initial year of the Samvat era.*

From this period Dilli is again lost sight of for several centuries. There is, indeed, a widespread tradition that it was deserted for 792 years. This, however, cannot be accepted without reservation; for in the erection, during the 3rd or 4th century A.D., of the famous iron pillar of Rájá Dháva, there is strong evidence that the site was occupied. The erection of this pillar must have been the work of a prince having pretension, at any rate, to great power; for

* General Cunningham places the defeat of the Sakas 135 years later, in A.D. 87.

the inscription upon it records that he "obtained with his own arm an undivided sovereignty on the earth for a long period." The pillar still exists, standing in perfect preservation where it was originally planted; and is a proof that, though Delhi may not have been at this time a great metropolis, yet it was, at any rate, a city of considerable importance.

The pillar of Rájá Dháva is one of the most curious monuments in India. It is a solid shaft of wrought-iron* 23 feet 8 inches in length, the shaft 20 feet 2 inches, of which 18½ feet are above ground, and the capital 3½ feet. The diameter of the shaft increases from 12·05 inches at the top to 16·4 inches at the ground. Below the ground the shaft expands in a bulbous form to a diameter of 2 feet 4 inches, and rests on a gridiron of iron bars let into the stone pavement with lead. Although there are flaws in many parts, yet this hardly diminishes the wonder caused by the manufacture of this monster pillar in those early times; and it is equally startling to find, that, after exposure to wind and rain for at least fourteen centuries it is unrusted and the capital and inscription are as clear and as sharp now as when it was first erected. The pillar records its own history in a deeply cut Sanskrit inscription in six lines on its western face. This has been deciphered by Mr. James Prinsep, who remarks that "the pillar is called the arm of fame (*kirtti bhuja*) of Rájá Dháva; and the letters cut upon it are called the typical cuts inflicted on his enemies by his sword, writing his immortal fame." It also records in the words already quoted, that Rájá Dháva "obtained with his own arm an undivided sovereignty on the earth for a long period." Mr. Prinsep, who first deciphered the inscription, refers it to the third or fourth century A.D., and General Cunningham, endorsing his opinion, has suggested the year A.D. 319 as an approximation to the date, thinking it not unlikely that Rájá Dháva may have assisted in the downfall of the powerful Gupta dynasty, an event which is fixed to have occurred in that year. Journal As. Soc., VII., p, 630. But Mr. Prinsep's reading has since been declared to be erroneous, and subsequent scholars have been unable to find the name of Rájá Dháva. Mr. Ferguson writes: "My own conviction is that it belongs to one of the Chandra Rájas of the Gupta dynasty, consequently either to A.D. 363 or A.D. 400."

Other traditions, taking various forms, concur in connecting the erection of the pillar with Bílan Deo, or Anang Pál, founder of the Tomára (Túnwar) dynasty, who flourished in the eighth century. He is said to have been assured by a learned Bráhman that as the foot of the pillar had been driven so deep into the ground that it rested on the head of Vasuki, King of the Serpents, who supports the earth, it was now immovable, and that dominion would remain in his family as long as the pillar stood. The Rája doubting the

* The pillar is usually described as of "mixed metal," resmbling bronze. General Cunningham however, submitted a small bit from the rough lower part of the pillar to Dr. Murray Thomson for analysis, who pronounced it to be "pure malleable iron of 7·66 specific gravity." And the same verdit was pronounced after analysis by Dr. Piercy of the Schools of Mines, London.

truth of the Bráhman's statement, ordered the pillar to be dug up, when the foot of it was found wet with the blood of the Serpent King. The iron pillar was again raised; but owing to the King's former incredulity, every plan now failed in fixing it firmly, and in spite of all his efforts it still remained loose (*dhíla*) in the ground, and this, according to these traditions, is said to have been the origin of the name of *Dhili*. Various other forms of the tradition are given, some of which have no reference to a prophecy of instability. Moreover, the name Delhi is undoubtedly older than the eighth century, and General Cunningham, with some probability, refers the origin of these traditions to a late period in the history of the Tomáras, when the long duration of their rule had induced people to compare its stability to that of the iron pillar; and he would refer the story above related to the reign of Anang Pál II., whose name is inscribed on the shaft with the date of Sambat 1109, or A.D. 1052.

The foundation of the Tomára (Túnwar) dynasty by Bílan Deo, better known as Anang Pál, is fixed by General Cunningham, on grounds which he considers "more than usually firm for early Indian history," to have taken place in 736 A.D. Anang Pál restored Dehli, and he and probably several of his successors, made it their capital. But the later Rájás of the dynasty are believed to have resided at Kanoj. In the middle of the 11th century Anang Pál II. would appear to have been expelled from Kanoj by Chandra Deva, founder of the Rahtor dynasty of that city, and once more Delhi became the Tomára capital. Anang Pál II. rebuilt and adorned the city, surrounding it with a massive fort named Lál Kot,* the remains of whose walls are still believed to exist in a line of grand old ruins that circle the site of the Kutb Minár. This restoration is briefly recorded, and its date fixed by an inscription upon Rájá Dháva's pillar—"in Sambat 1109" (corresponding to 1052 A.D.) "Anang Pál peopled Dilli."

Just a century later, during the reign of Anang Pál III. the last of the Tomára line, Delhi was taken by Visala Deva, Chohan king of Ajmír. Anang Pál was left in possession, but only as a tributary, and his daughter married the son or grandson of the conqueror. From this union was born the famous Prithi Raj or Rai Pithora, who became the adopted son of Anang Pál, and on his death succeeded to his throne, thus uniting the Tomáras and Chohans under one head. During this reign the fort of Lál Kot was further strengthened by an exterior wall which ran round it northwards from its north-west to its south-east corner, while the old fort rose above the ground enclosed, and formed a citadel to the new fortification.† Príthí Ráj was the last Hindu ruler of Dehli. In 1191 came the first invasion of

* J. A. S. p. 151. The fort of Lál Kot is of an irregular rounded oblong form, $2\frac{1}{4}$ miles in circumference. The walls, by General Cunningham's measurements, are 28 or 30 feet in thickness, having a general height of 60 feet from the bottom of the ditch, which still exists in very fair order all round the fort except on the south side. About half the main walls are standing as firm and solid as when first built. Three gateways to the west and north are distinctly traceable.

The existence of a fort of this name is doubted by Mr. C. J. Campbell (Journal Asiatic Society of Bengal, Vol. 35, Part I, p. 206) whose arguments are endorsed and supplemented by the author of "The Archæology of Dehli," p. 24.

† Rai Pithora's fort is 4 miles and 3 furlongs in circuit. The wall can still be traced for a considerable distance. It appears to have been only half the height of Lál Kot.

Chapter VI.

Towns, Municip lities and Canto ments.

History.

Muhammad Shaháb-ud-dín of Ghor, and though he was defeated by Príthí Ráj on this occasion, he returned two years later and utterly overthrew the Hindus in the great battle of Tilauri. Príthí Ráj was captured and put to death, while Dehli itself, falling during the same year into the hands of Kutb-ud-dín, one of Shaháb-ud-dín's Generals, became from that time forwards the metropolis of Muhammadan Empire in India.

During the lifetime of his master, Kutb-ud-dín held Dehli as his Viceroy. But his death in 1206 was followed by the dissolution of his empire, and Kutb-ud-dín became independent sovereign of India with Dehli as his capital. He was by origin a Turki slave, and the dynasty founded by him is known as that of the Slave Kings. It is to this dynasty that Dehli owes most of its grandest ruins. The great mosque of Kutb-ud-dín was commenced immediately after the capture of Dehli in 1193, as recorded in an inscription over the inner archway of the eastern entrance. It was finished in 1196, and enlarged during the reign of Altamish, son-in-law of Kutb-ud-dín. The famous Kutb Minár was also begun by Kutb-ud-dín about the year 1200, and was finished by the same Altamish in 1220. The mosque consists of an inner and an outer courtyard, of which the inner is surrounded by an exquisite colonnade or cloister, the pillars of which are made of richly decorated shafts, the spoils of Hindu temples, piled one upon the other in order to obtain the required height. As originally set up, the whole must have been thickly covered over with a coat of plaster, to conceal the idolatrous emblems, unendurable to Musalmán eyes, with which they are profusely decorated. But at the present day the plaster has fallen and left the pillars standing in their pristine beauty. Ferguson attributes these pillars to the ninth or tenth century A.D. The glory of the mosque, however, is not in these Hindu remains, but in the Kutb Minár and the grand line of arches that closes its western side, extending from north to south for about 385 feet. They are eleven in number, three greater and eight smaller. The central arch is 22 feet wide and 53 feet high. The larger side arches are 24 feet 4 inches wide and about the same height as the centre one, while the smaller arches are of about half these dimensions. Their general design is probably Muhammadan, but the actual building was apparently left to Hindu architects and workmen. The principle of construction is the same as that of the Hindu dome, the building being carried up in horizontal courses as far as possible, and then closed in by long slabs meeting at the top. The whole is covered with a lacework of intricate and delicate carving, also the work of Hindu hands. Iban Batuta, who saw the mosque about 150 years after its erection, describes it as having no equal either for beauty or extent.

The Kutb Minar stands in the south-east corner of the outer courtyard. There has been of late years much speculation as to the origin of the Kutb Minar, whether it is a purely Muhammadan building or a Hindu building altered and completed by the conquerors. The latter is the common belief of the people, who say that the pillar was built by Rai Pithora for the purpose of giving his daughter a view of the river Jamna. General Cunningham, with more probability, insists strongly that the entire building is Muhammadan. It

Chapter VI.

Towns, Municipalities and Cantonments.

History.

was probably constructed as a *Mazima* or *Muazzam's* tower, from which the call to morning and evening prayer might be heard in all parts of the town; and it was probably commenced by Kutb-ul-dín Aibak from whom it derives its name about the year 1200 A.D. The height of the Minar as it now stands is 238 feet 1 inch, with a base diameter of 47 3 feet inches, and an upper diameter of nearly nine feet. The shaft is divided into 5 storeys, separated by balconies decorated with ornamental bands. The column is built of red sandstone, of which the lowest is 94 feet 11 inches in height and the highest 22 feet 4 inches, the two together being just equal to half the height of the column. The intermediate storeys are 50 feet 8½ inches, 40 feet 3½ inches, and 25 feet 4 inches, respectively. Of these three storeys, the lowest has semi-circular fluting, the next angular fluting, and the third is a smooth cylinder. The circular shaft of the topmost storey is decorated with ornamental bands of marble and red sandstone; on each storey are numerous inscriptions. The plinth is 2 feet in height and is a polygon with 24 sides; and the base of a broken cupola, also 2 feet high, makes up the total of 238·1. A spiral staircase of 179 steps leads to the present summit. In 1803 the cupola, which formerly crowned the edifice, was thrown down and the whole pillar seriously injured by an earthquake. It was repaired by Major Robert Smith, who substituted for the fallen cupola, "a flaming Mughal pavilion" utterly out of keeping with the Pathán architecture of the pillar. This was taken down in 1847 or 1848 by order of Lord Harding. The summit is now surrounded by a simple iron railing. At a distance of 425 feet due north from the pillar stands the unfinish Minar of Ala-ud-dín, commenced in A.D. 1311, which was intended to double in its proportions the Minar of Kutb-ud-dín. It reached a height of 87 feet, but at this point building ceased. The site chosen for the great mosque was that already occupied by the iron pillar of Rája Dháva, which forms the centre ornament of the inner courtyard. Round the mosque are scattered the remains of palaces and tombs, forming, as has been said, "the most interesting group of ruins which exists in India, or perhaps in any part of the world." No description, however, can be here attempted.

The house of the Slaves retained the throne until 1288, when it was subverted by Jalal-ud-dín Ghilzai (Khilji). The most remarkable monarch of the dynasty thus founded was Ala-ud-dín, already alluded to, during whose reign Delhi was twice exposed to attack from invading hordes of Mughals. On the first occasion Ala-ud-dín defeated them under the walls. On the second, after encamping for two months in the neighbourhood of the city, they retired without a battle. Relieved from the danngers of this invasion, Ala-ud-din built the fort of Siri or Shahpur, a little to the north of the present town, on the spot where he had entrenched himself to oppose the Mughals, and erected in it the celebrated palace of the thousand pillars. The house of Ghilzai came to an end in 1321 and was followed by that of Tughlak. Hitherto the Musalmán kings had been content with the ancient Hindu capital, altered and adorned to suit their taste. But the new dynasty had a passion for great public works, and one of the first acts of Ghiyas-ud-dín, its founder, was to erect a new capital about four miles further to the east, which he called, after his own

Chapter VI.

Towns, Municipalities and Cantonments.

History.

name, Tughlakabad. Selecting a rocky eminence for his site, he surrounded the new city with a magnificent wall of massive stone crowning the whole with a citadel of enormous strength. The ruins of this grand old fort present in modern days a scene of utter desolation. The eye can still trace the streets and lanes of the deserted city, but with the exception of the thin smoke of a Gújar village rising in the distance, there is not a sign of life within or around. And the desolation serves perhaps to heighten the impression produced by the size, strength and the visible solidity of the stern and massive walls.

The fort is in the shape of an irregular half circle. Its base towards the south is $1\frac{1}{4}$ miles in length, and the whole circuit 1 furlong less than 4 miles. It stands on a rocky height, and is built of large plainly dressed blocks of stone, some of which are so heavy and massive that they must have been quarried on the spot. One of the largest has been measured and found to be 14 feet in length by 2 feet 2 inches and 1 foot 10 inches in breadth and thickness. The faces towards the north-west and east are protected by a deep ditch, and the long face to the south by a large sheet of water, held up at the south-east corner by an embankment. On this side the rock is scarped, and above it the main walls rise to a mean height of 40 feet with a parapet of 7 feet; behind which rises another wall of 15 feet, the whole height above the plain being upwards of 90 feet. In the south-west angle is the citadel which rises above the fort, occupying about one-sixth of its area and containing the ruins of an extensive palace. The walls, like those of Egyptian buildings, slope very rapidly inwards, and their foot is commanded by low slanting loopholes in the ramparts. The whole of this great work is said to have been constructed within two years, from 1321 to 1323; and if this seems incredible, four years is the utmost limit, for it is admitted on all hands to have been completed during the reign of Ghiásuddin who died in 1325. Ghiásuddin was succeeded by his son Muhammad Tughlak who reigned from 1325 to 1351. This is the king who is described by Elphinstone as "one of the most accomplished princes, "and most furious tyrants, that ever adorned or disgraced human "nature." Among other freaks more immediately concerning the city of Delhi, he three times attempted to remove the capital of his empire to Deogiri in the Dekkan. Three times did he order the inhabitants of Delhi to abandon their homes and travel to the new city, a distance of 800 miles, along a road which he caused to be planted with full grown trees. On each occasion they were allowed to return, but the journeys were, of course, fraught with ruin and distress to thousands, and caused a prodigious loss of life. The state of the city under this reign is described by Ibn Batúta, a native of Tangiers, who visited the court of Muhammad about 1341. He presents just such a "picture of mixed magnificence and desolation as one "would expect under such a sovereign." He describes Delhi as a most magnificent city, its mosque and walls without an equal on earth; but although the king was then repeopling it, it was almost a desert. "The greatest city in the world," he says, "had the fewest inhabi-

Chapter VI.

Towns, Municipalities and Cantonments.

History.

tants." Of the tomb of Ghiásuddin Tughlak the following description occurs in the *Archæology of Delhi*:

"It is situated in the midst of an artificial lake, fed by the overflowing of the Hauz Shamsí and by a lot of natural drains which flowed into the base of the fort, and which at one time must have formed one of its natural defences. It is surrounded by a pentagonal outwork, which is connected with the fortress by a causeway 600 feet in length, supported on 27 arches. In plan, the tomb is a square of 38½ feet interior, and 61½ feet exterior dimensions. The outer walls are 38½ feet in height to the top of the battlement, with a slope of 2·333 per foot. At this rate the whole slope is 7½ feet in 38½ feet. The walls at base are 11⅓ feet thick, and at top only 4 feet; but the projecting mouldings of the interior increase the thickness of the wall at the springing of the dome to about 6 or 7 feet or perhaps more, for I had no means of making measurements so high up. The diameter of the dome is about 34 feet inside and about 44 feet outside, with a height of 20 feet; the dome is of marble, striped with red stone. The whole height of the tomb to the top of the dome is 70 feet, and to the top of the pinnacle (which is made of red stone) about 80 feet. Each of the four sides has a lofty doorway in the middle, 24 feet in height, with a painted horse-shoe arch, fretted on the outer edge. There is a small doorway only 5 feet 10 inches in width, but of the same form, in the middle of the great entrances, the archway being filled with a white marble lattice screen of bold pattern. The decoration of the exterior depends chiefly on difference of colour, which is effected by the free use of bands and borders of white marble on the large sloping surfaces of red stone. The horse-shoe arches are of white marble, and a broad band of the same goes completely round the building at the springing of the arches. Another broad band of marble in upright slabs, 4 feet in height, goes all round the dome just above its springing. The present effect of this mixture of colour is certainly pleasing, but I believe that much of its beauty is due to the mellowing hand of time which has softened the crude redness of standstone as well as the dazzling whiteness of the marble. The building itself is in very good order." *Archæological Reports, Vol. I p.* 653.

Muhammad Tughlak added to the strength of the city by a wall stretching north-east, and enclosing all the suburbs as far as the fort of Siri erected by Ala-ud-dín, and to this quarter of the city he gave the name of Jahán-panáh. By this addition the ancient town attained its utmost growth. But the period of its decline was at hand. For the very next king, Fíroz Sháh Tughlak, transferred the seat of government to a new town, which he founded several miles to the north of the Kutb, and called after his own name, Fírozábád. The buildings connected with this city appear to have extended from Húmáyun's tomb on the south to the ridge beyond the modern city on the north. The ruins, however, are very imperfect, and it is impossible to trace the exact form even of its citadel or palace, which lay just outside the southern gate of the modern city. The principal remains of this city are the Kále Masjid near the Turcomán gate, and Fíroz Sháh's fort near the Delhi gate. In the midst of its ruins stand the famous pillar of Asoka, better known as Firoz Sháh's *láth*, fixed upon the summit of the three-storeyed building known as Fíroz Sháh's *kotila*. The *láth* was brought by Fíroz Sháh from a spot near Khizrábád, on the Jamna, near the place where that river issues

Chapter VI.

Towns, Municipalities and Cantonments.

History.

from the hills, and identified by General Cunningham as being in the immediate neighbourhood of the ancient city of Srugna. It contains an inscription of the celebrated edicts of Asoka issued in the middle of the third century B.C. The inscription is in the ancient Páli form of Sanscrit, and its deciphering by Mr. James Prinsep is among the greatest triumphs of modern scholarship.

As to the population of Delhi at this period, General Cunningham thinks that that of Fírozábád cannot have been less than 150,000, even if only a part of the space enclosed by it was inhabited. He would also reckon the population of old Delhi to be about 100,000, thus making up the total number of inhabitants of the two cities to a quarter of a million. By most, however, this estimate will probably be considered excessive.

The history of the successors of Fíroz Sháh presents a succession of fierce commotions and sanguinary broils, which devastated alike the capital and the empire at large, until, at last, during the reign of Muhammad Tughlak, the invasion of Tamerlane burst upon the contending parties and overwhelmed them in a common ruin. After carrying fire and sword through the Punjab, Tamerlane reached Delhi in December 1398. The King fled to Gújrát, and his army was defeated under the walls of Delhi. The city surrendered on a solemn promise of protection; and Tamerlane entering was publicly proclaimed Emperor. The promise of protection, however, availed but little. Plunder and violence, begun by the conquering army, brought on resistance; and then followed a scene of horror baffling description. The whole city was for five days given up to a general massacre, and such was the slaughter, that many streets were rendered impassable by heaps of dead. Satiated with carnage and plunder, the invaders at last retired, dragging large numbers, both of men and women, into slavery. For two months after Tamerlane's departure, Delhi remained without a government, and almost without inhabitants. At last Muhammad Tughlak regained a fragment of his former empire, but on his death, in 1412, his family became extinct. He was followed by the Sayad dynasty, which held Delhi with a few miles of territory until 1444, and then gave way to the house of Lodi. The monarchs of the Lodi family appear to have in a measure deserted Delhi, making Agra their capital. At last, in 1526, during the reign of Ibráhím Lodi, Bábar, * sixth in descent from Tamerlane, marched into India at the head of a small body of veteran soldiers, and, having defeated and killed Ibráhím Lodi, at the great battle of Pánípat, advanced upon Delhi, which opened her gates to her new ruler in May 1526.

Thus ended the period of Afghán rule in Delhi. From Bábar sprang the long line of Mughal Emperors, under whom Delhi reached the zenith of her glory.† Bábar died in 1530, at Agra, which,

* His real name was Zahir-ul-din Muhammad; Bábar, the lion, was his Tartar *sobriquet*.

† Tamerlane and his descendent Bábar with the dynasty that sprang from them are known as Mughals. There is little certainty as to the race to which they did actually belong. They were of Túrki origin and certainly not Mughals. Indeed, Bábar in his Memoirs never speaks of the Mughal nation but with contempt and aversion.

Chapter VI.

Towns, Municipalities and Cantonments.

History.

like his predecessors, the Lodis, he seems to have made his principal residence. In consequence probably of this desertion, the city of Fírozábád seems never to have recovered after its overthrow by Tamerlane in 1398, and when Humáyún, son of Bábar, determined to make Delhi his residence, he found it necessary to build or restore the fort of Purána Kila or Indrapat,* on the side of the ancient Indraprástha. Humáyún called his new fort Dín-panáh. That name, however, soon fell out of use, and the fort is ordinarily known as Purána Kila. In 1540 Humáyún was expelled by Sher Sháh, and this monarch entirely rebuilt the city, enclosing and fortifying it with a new wall. Delhi Sher Sháh, as the renovated town was called, extended from where Humáyún's tomb now is, to the citadel of Fíroz Tughlak already described as just outside the southern gate of the present city ; and Humáyún's fort of Dín-panáh, further strengthened, formed its citadel. The materials for this work were chiefly taken from Ala-ud-dín's fort of Siri, and from other buildings of the ancient city. A gate of Delhi Sher Sháh, called originally the Kábali Darwáza, but commonly known by the name of Lal Darwáza, or red gate, is now standing, a striking but isolated building, on the road side opposite the present jail. Another work of this time was Salimgarh, the fort already alluded to as situated at the north-east corner of the palace at the point where the East Indian Railway crosses the Jamna into the city. It was erected by Salím Sháh, son of Sher Sháh, in 1546.

In 1555 Humáyún regained the throne, but died within six months after his success. He was succeeded by his son, the illustrious Akbar, who ascended the throne early in 1556. During this reign and that of Jahángír, nothing of local interest is recorded : the Emperors principally resided at Agra or Lahore, while Delhi seems once more to have fallen into decay. But between the years 1638 and 1658† king Sháh Jahán once more rebuilt it almost in its present form, and his city, still known as Sháhjahánábád, is, with a few trifling exceptions, the city of modern days. It is to Sháh Jahán also that Delhi is indebted for the great mosque, called the Jáma Masjid, and for the restoration of the present Western Jamna Canal. Delhi, thus restored, was the capital of the renowned Aurangzeb (Alamgír I.), the greatest of the Mughal kings, and during his reign, from 1658 to 1707, was uniformly prosperous.

From the death of Aurangzeb began the rapid decline of the Mughal Empire, and in the struggles of the ensuing century, Delhi suffered much and often. Bahádur Sháh, Jahándár Sháh and Farokhsher followed each other on the throne in quick succession. Farokhsher was succeeded 1719 by Muhammad Sháh, during whose reign Delhi saw under her walls for the first time the standards of the Mahratta destined afterwards to play such an important part in her history. Three years later, in 1729, the Persian Nádir Sháh

His mother however was a Mughal. The reason for this strange perversion of names, seems to be that the Indians call all Northern Musalmáns, except the Afgháns, Mughals. They now apply the term particularly to the Persians.

* General Cunningham believes that he built it entirely.

† The citadel or Palace, now known as the Fort, was begun in 1638 ; and the outer walls ten years later.

Chapter VI.

Towns, Municipalities and Cantonments.

History.

entered the city in triumph. On the second day after his entry a report was spread that Nádir Sháh was dead, and the Indians, encouraged by the rumour, fell upon the Persian sentries, murdering many of them. Nádir Sháh, after vainly attempting to stay the tumult, at last gave the order for a general massacre. "The slaughter raged "from sunrise till the day was far advanced, and was attended with all "the horrors that could be inspired by rapine, lust and thirst of vengeance. The city was set on fire in several places, and was soon involved in one scene of destruction, blood and terror;"* and though the massacre was at last stayed it wasonly to be succeeded by systematic extortion and plunder. Contributions were levied upon all, rich and poor alike, and extorted by every species of cruelty. "Sleep and rest "forsook the city. It was before a general massacre, but now the "murder of individuals." For fifty-eight days Nádir Sháh remained in Delhi, until satisfied that nothing more could be wrung from the devoted city; and when at last he left, he carried with him a treasure in money amounting, by the lowest computation, to eight or nine millions sterling, besides jewels of inestimable value, and other property to the amount of several millions more, including the celebrated Peacock Throne. The city lay exhausted, deserted, ruined; and not till long after Nádir was gone did the court awake, as it were, from a lethargy.

It is as impossible within the limits of the present account, as it would be out of place, to attempt to trace the history of the collapse of the Mughal Empire under the repeated blows dealt by Ahmad Sháh Duráni on the one hand and the Mahrattas the other. Our concern at present is only with the capital; and it must suffice to say that before the final disruption of the empire in 1760, the unhappy city was first devastated by a civil war carried on for six months by daily combats in her streets; was twice sacked by Ahmad Sháh Duráni, when all the horrors of Nádir Sháh's invasion were repeated; and lastly, what Persian and Afghán had left, was seized by the rapacious Mahrattas. Alamgír II., the last real Emperor, was murdered in 1760, and then ensued a period of unexampled confusion. Sháh Alam, an exile from his capital, assumed the empty name of king, but Delhi was a prey alternately to the Duráni and the Mahratta. At last the latter gained the day, and restored Sháh Alam to his capital in 1771. The king made one feeble effort to shake off Mahratta rule, but was utterly defeated at Badarpur, ten miles to the south of Delhi. In 1788 the Palace was permanently occupied by a Mahratta garrison, and the king remained a cypher in the hand of Sindhia until the day (March 14th, 1803) when Lord Lake, having defeated the French General of the Mahrattas under the city walls, entered and took the puppet king under British protection.

Delhi was once more attacked by a Mahratta army under Holkar in 1804, after the disastrous retreat of Colonel Monson; but was gallantly defended by a small force under Colonel Ochterlony, the British Resident, who successfully held out against overwhelming numbers for eight days, until relieved by Lord Lake.

* The number of victims have been estimated as from 120,000 to 150,000.

Chapter VI.

Towns. Municipalities and Cantonments.

Holkar retreated, and from this date a new epoch in the history of Delhi began. The Palace remained under the immediate rule of the king, but the city, together with the Delhi territory, passed under British Administration, and enjoyed a long immunity from war and bloodshed. For fifty-three years nothing occurred to break the monotony of prosperity and peace. At length, however, the calm was rudely broken in upon by the stormy events of 1857.

The Mutiny.

For some months during the earlier portion of the year an uneasy presentiment is said to have prevailed among all classes of native society in Delhi, and a vague feeling of excitement in reference to some expected event, a feeling which was eagerly fomented by intrigues in the Palace, and was fed by false or exaggerated reports of the Persian war. At length the storm burst. On the evening of May 10th, occurred the Mutiny at Mirath, and on the morning of the 11th, the mutinous troopers had crossed the Jamna and stood clamouring for admittance below the Palace wall. The scene that followed has been too often described to need a minute relation here. Finding the Calcutta gate* which was nearest to the river crossing closed, the troopers doubled back towards the south, and fouud an entrance at the Rájghát gate in Dariá Ganj. Meanwhile, Captain Douglas, Commandant of the Palace Guards, Mr. Fraser, the Commissioner, and Mr. Hutchinson, Collector, had met at the Calcutta gate. On the approach of the mutineers from within, they escaped to the Lahore gate of the Palace and there were murdered. The Palace was occupied by crowds of troops and the whole city thrown into a ferment of confusion. At this time almost the whole civil and non-official residents of the station had their houses within the city wall, and fell an easy prey to the insurgents. The troopers from Mirath, joined by the roughs of the city, carried murder and rapine into every house. Soon too the infantry from Mirath began to arrive, and by 8 o'clock the mutineers were sole masters of every yard within the city walls, except the magazine and the main-guard just within the Kashmír gate.

Meanwhile the news reached the cantonment beyond the ridge that overlooks the city. The troops in the station were entirely native, three regiments of native infantry, the 38th, the 54th, and the 74th, and a battery of native artillery. The 54th were marched promptly down to the Kashmír gate and the main-guard, where a detatchment of the 38th was posted. These had already in their hearts cast in their lot with the mutineers, who were then appearing on the scene. Ordered to fire on the insurgents, they responded only by insulting sneers. Nor was the conduct of the 54th much better. Several European officers were cut down either by the insurgent troopers or by men of their own regiments, and when the artillery officers entered the gate a few minutes later, they found the traces of the conflict in the dead bodies of their comrades. The insurgents, alarmed by the report of the approach of guns, had dispersed followed by the greater portion of the 54th. The guns were planted before the main-guard, and two companies of the 54th,

* The old Calcutta gate no longer exists. It was destroyed in the construction of the Railway.

The Mutiny.

which had accompanied them from cantonments, were posted as a garrison. They were now joined by the 74th, under Major Abbott, and the force, thus augmented, remained under arms all day at the main-guard, joined from time to time by the few fugitives who, almost by a miracle, escaped from the city.

The magazine stood half way between the palace and the main-guard. It was under the charge of Lieutenant Willoughby, with whom were associated Lieutenants Forest and Raynor and six European Conductors and Commissariat Sergeants. The native subordinates fled at the first sound of an attack upon the magazine, but the nine Europeans held out bravely for some time in the hope of succour, determined to defend to the last the enormous accumulation of the munitions of war collected in the magazine. About midday an explosion was heard at the main-guard, which shook the building to its foundation. It was the powder magazine fired by Willoughby and his companions when further defence was hopeless. Willoughby and Forest escaped to the Main-guard. Raynor and one of the Sergeants took a different direction and eventually reached Mirath. The remaining five of the nine perished in the explosion. All day long the sepoys in the cantonment, as well as at the main-guard, had been hovering on the brink of open mutiny, and were restrained only by the fear of the white regiments which were expected every moment to arrive from Mirath. But the day wore on, and no white regiments arrived, and at last the cloak was thrown off. The massacre at the Main-guard was begun by a murderous volley from the 38th, fired into the midst of the English officers and fugitives from the city, among whom were several ladies. A few escaped by an embrasure in the city wall, and clambering across the ditch, sought a refuge in the direction of the cantonments. Here, however, things were but little better. Before evening the sepoys had thrown of all semblance of allegiance. The ladies and children were for a time collected in the flagstaff tower on the summit of the ridge; but when the remaining guns were seized by mutinous sepoys, and it became impossible to hold together even those who were inclined to remain faithful, no resource remained but flight. A few officers, remaining to the last, rescued the regimental colours. And then even these were forced to fly: and every vestige of British authority was stamped out of the cantonments, as in the morning it had been from the city. All through that night and the following days the fugitives toiled on. To some the villagers gave help ; others they despoiled. Many perished miserably on the road, or, unable to proceed, fell a prey to marauding bands of robbers. The remainder, struggling painfully on, often assisted and sheltered by the people, and especially by the Játs, at last found a refuge in Karnál and Mirath.

Meanwhile, in Delhi, some fifty Christians, European and Eurasian residents of Dariá Ganj, remained alive, thrust indiscriminately into a stifling chamber of the palace. For fifteen days they remained thus confined, and on the 16th were led forth to die. A rope was thrown round the whole party so that none could escape, and thus, in a courtyard of the palace, they were foully massacred.

Chapter VI.

Towns, Municipalities and Cantonments.

The Mutiny.

A sweeper who helped to dispose of the corpses, afterwards deposed that there were but five or six men among them; the rest were women and children. The bodies were heaped upon a cart, borne to the banks of the Jamna, and thrown into the river.

A short month later, on June 8th, was fought the battle of Bádli-ki-Sarai, and that same evening the avenging British force, sweeping the mutineers from their old cantonment and the Sabzi Mandi Bázár, encamped upon the ridge that overlooks the city. It would be foreign to the scope of the present account to trace the history of the ensuing siege, which has been already narrated by a hundred pens. For three long fiery months it dragged on, the 'Delhi Field Force' besieged upon the ridge rather than besieging, and the communication between the city and outside not being cut off except on the north. At length, the heavy guns arriving, it was determined to carry the city by assault. The first of the heavy batteries opened fire on September 8th, and on the morning of the 14th the British force, 7,000 men in all, advanced to storm the walls defended by 60,000 mutineers. The four points of attack were the Kashmír Bastion, the Water Bastion, the Kashmír Gate and the Lahore Gate.

The attacking force was divided into four columns with a reserve. The first two columns were to storm the breach in the Kashmír Bastion and the Water Bastion, the third to blow open the Kashmír Gate, and the fourth to clear the suburbs to the west of the city, and enter by the Lahore Gate. In advance of all were the 60th Rifles, concealed in the brushwood, stretching up to within musket shot of the walls, ready to keep down the fire of the rebels, and cover the advance of columns. On September 14th, at 3 A. M., the columns had fallen in at Ludlow Castle, but during the night, the breaches had been filled with sand-bags, and the columns were obliged to wait till the fire from the guns could once more clear the way. The troops lay down under shelter, and the advance of the rifles to the front with a cheer, was to be the signal for the cessation of the fire from the batteries, and the assault of the columns.

The following is Mr. Cooper's account of what ensued: "At the head of the third column stood the gallant exploding party consisting of Lieutenants Salkeld and Home of the Engineers, Sergeants Carmichael, Burgess and Smith of the Bengal Sappers, Bugler Hawthorne of the 52nd L. I. (who accompanied the party to sound the advance when the gate was blown in), and eight native Sappers, under Havildár Mádhu, to carry the bags. At the edge of the cover, the powder-bags had been transferred to the European soldiers. Here stood this heroic little band, forming a forlorn hope, feeling themselves doomed to almost certain death, waiting in almost agonising suspense for the appointed signal. It came; the firing suddenly ceased, the cheer of the Rifles rang through the air, out moved Home with four soldiers, each carrying a bag of powder on his head; close behind him came Salkeld, portfire in hand, with four more soldiers similarly laden, while a short distance behind the storming party, 150 strong, consisting of—

50 H. M. 52nd L. I.,
50 Kumaon Battalion,
50 First Punjab Infantry under Captain Bailey,

Chapter VI.

Towns, Municipalities and Cantonments.

The Mutiny.

followed up by the main body of the column in rear. The gateway, as in all native cities, was on the side of the bastion, and had an outer gateway in advance of the ditch. Home and his party were at this outer gate, almost before their appearance was known. It was open, but the drawbridge so shattered that it was very difficult to cross. However, they got over, reached the main gate, and laid their bags unharmed.

"So utterly paralyzed were the enemy by the audacity of the proceeding, that they only fired a few straggling shots, and made haste to close the wicket, with every appearance of alarm, so that Lieutenant Home, after laying his bags, jumped into the ditch unhurt. It was now Salkeld's turn. He also advanced with four other bags and a lighted portfire, but the enemy had now recovered from their consternation, and had seen the smallness of the party, and the object of their approach. A deadly fire was poured on the little band, from the open wicket, not ten feet distant. Salkeld laid his bags, but was shot through the leg and arm, and fell back on the bridge, handing the portfire to Sergeant Burgess, bidding him light the fusee. Burgess was instantly shot dead in the attempt; Sergeant Carmichael then advanced, took up the portfire, and succeeded in the attempt, but immediately fell mortally wounded. Sergeant Smith, seeing him fall, advanced at a run, but finding the fusee was already burning, threw himself down into the ditch, where the bugler had already conveyed Salkeld. In another moment, a terrific explosion shattered the massive gateway, the bugle sounded the advance, and then with a loud cheer, the storming party was in the gateway, and, in a few minutes more, the column; and the Kashmír Gate and Main Guard were once more in the hands of British troops." The first column, under General Nicholson and the second under Colonel Jones were equally successful in carrying the breaches at the Kashmír and Water Bastions, and both columns uniting the other side, marched along the narrow lane encircling the city inside the walls, and cleared the walls as far as the Kábul Gate. The third column, after blowing up the Kashmír Gate, pushed on to the Chándni Chauk, but were eventually forced to retire on the Church. The fourth column was the least fortunate, and was forced to retreat. The retreat, however, in spite of considerable loss, was made in good order.

But now the main difficulty had been overcome. The attacking force had now entered the city, and day by day it was gradually cleared of the rebels. On the 16th September the magazine (now the Post Office) was stormed by Her Majesty's 61st Regiment with some Panjábis and Biloches under Colonel Deacon. On the 17th the Delhi Bank House was carried, and on 19th the line of communication between the magazine and the Kábul Gate was completed, and in a few days more the whole city was cleared of the rebels, and the capital of the Mughals was in our hands, never again to be given up to the pageant sovereign, who had exercised his dominion therein for so long.

The loss, however, was very heavy. On that famous 14th of September, 66 officers and 1,104 men were counted among the killed and wounded. Foremost on the fatal list stands the famous name of

Chapter VI.

Towns, Municipalities and Cantonments.

The Mutiny.

General John Nicholson. He, the life and soul of the assault, had headed the first column of attack which stormed the Kashmír Bastion. Reforming his men, he entered the narrow lane behind the walls, and swept along inside, past the Mori and Kábul Gates, clearing the rebel forces from the walls. He was approaching the Lahore Gate, when fire was opened upon his column from the Burn Bastion, and from a breastwork planted across the lane. Leading on his men to attack the breastwork, he fell mortally wounded by a musket-ball. He was carried to the rear, his column falling back to the Kábul Gate, but he lived to hear of the complete success of the whole attack. After lingering on for a few days he breathed his last.

The King and several members of the Royal Family, on the flight of the mutineers, took refuge at Húmáyún's tomb. Here, on September 21st, they surrendered to Major Hodson, who with his own hand, in order to avoid a rescue, shot the young princes down. The King, Bahádur Shah, was brought into Delhi and tried before a Military Commission. He was found guilty of encouraging and abetting acts of rebellion and murder, and being saved from a severer penalty by a guarantee of his life which he had received from Major Hodson at the time of his surrender, he was sentenced to perpetual banishment. He was removed to Rangoon, where he died, a pensioner of the British Government, on October 7th, 1862.

Delhi, thus reconquered, remained for some time under military authority, and owing to the murders of several European soldiers who straggled from the lines, the whole population was shortly afterwards expelled. The order of expulsion was afterwards modified, Hindús being generally admitted, but Muhammadans still rigorously excluded. This was the state of affairs when, on January 11th, 1858, the city was made over to the Civil authorities. In July 1858, Civil Courts were re-opened and the city gradually resumed its wonted appearance. But even to the present day, the shattered walls of the Kashmír Gate and the bastions of the northern face of the city bear visible testimony to the severity of the cannonade of September 1857. The cantonments were constituted in 1859. Since then, the only events of importance that have occurred at Delhi have been the visit of the Prince of Wales in 1876, and the Imperial proclamation in 1877, when all the feudatories of the Indian Empire were assembled at the Mughal capital of India.

Objects of interest in the neighbourhood.

Any description of Delhi would be incomplete without a passing notice of some of the very interesting objects in the vicinity of the town.*

Of these the foremost is the Kutb Minár, which has been already described a few pages back. Within a few yards of the Kutb is the celebrated iron pillar already described. On the other side of the Kutb is the Alai Darwáza, or gate of Ala-ud-dín Khilji. It was built about 1310 A.D. The building is a square of $34\frac{1}{2}$ feet inside, and $56\frac{1}{2}$ feet outside; the walls being 11 feet thick; from the inner floor to the domed ceiling it is about 47 feet high. The corners are ornamented with a series of arched

* For bibliography, see page 185.

Chapter VI.

Towns, Municipalities and Cantonments.

Objects of interest in the neighbourhood.

niches, which cut off the angles of the square, and so turned the support of the dome into an octagon. On each side of the gateway is a lofty door, those on the northern and southern sides being the loftiest. The doorways are most elaborately ornamented; each door is formed by a pointed horse-shoe arch, of which the outer edge is panelled. The whole face of the building is ornamented with elaborate chiselling, the most attractive features being the bands of inscription. A short distance away from the Kutb is the basement of another similar building, with the base considerably broader than the original. It was also designed by Ala-ud-dín Khilji, but unfinished at his death. Intermingled with the Muhammadan ruins round the Kutb are ruins of an ancient Buddhist temple, of no great value as works of art, but interesting as showing the existence of that religion at an early age in Hindústan. Adjoining the Kutb is the Kila Rai Pittora, the remains of an old Hindu fort, with the walls clearly discernible. The principal buildings connected with the Kutb have now been enumerated; but besides these there are numerous tombs and temples round the relics of emperors, saints, and statesmen. The most prominent, perhaps, is the tomb of Adam Khán, an octangular building with a dome, now used as a rest-house for the officers of the Delhi district.

Between the Kutb and Delhi is the tomb of Safdar Jang, the Wazír of the Emperor Ahmad Sháh. It is about five miles from modern Delhi, and stands in the centre of an extensive garden on a lofty terrace containing arched cells. The roof of the tomb is surmounted by a marble dome, and is supported by open marble pavilions on the four corners. The garden is about 300 yards square, and at each of the four corners is an octagonal tower, the sides of which, with the exception of the entrance, are covered with perforated red stone screens. Behind the gateway, and a little to the north of it, there is a *masjid* with three domes and three arched entrances built throughout of red sandstone. The terrace over which the tomb stands is 10 feet above the level of the garden and 110 feet square. In the centre of the terrace is a vault under which is the grave of Safdar Jang. The building over the grave is about 60 feet square, and 90 feet high. In its centre there is a room 20 feet square, containing a beautiful marble monument highly polished and massively carved. Round the centre room there are eight apartments, four square and four octagonal. The pavement and the walls of the room up to the waist are marble. The roof of the centre room is about 40 feet high, and the ceiling is formed by a flattish dome. In the centre of the roof stands a bulbous marble dome with marble minarets at each angle. The four faces of the tomb are alike both in construction and ornamentation; the latter consists of inlaid bands of marble. A stone aqueduct deprived both of its fountains and water may yet be seen in front of the tomb.

Continuing along the road from the Kutb to Delhi on the right hand side about two miles from Delhi the Jantar Mantar is reached. This was erected in the third year of Muhammad Sháh A.D. 1724 by the astronomer Jey Singh, founder of the principality of Jaipur. The work was begun, but never completed, owing to the death of

Chapter VI.

Towns, Municipalities and Cantonments.

Objects of interest in the neighbourhood.

the projector and the disturbed state of the Empire. What was finished has been seriously injured by the Játs and others, but even now proves considerable astronomical skill on the part of the projector. The great equatorial dial is still nearly perfect, but the gnomon and the periphery of the circle on which the degrees are marked have been injured in several places. The length of the gnomon is 118 feet, base 104, and perpendicular 56. Besides this gnomon there are two others on a smaller scale, all three being connected by a wall on which is described a graduated semicircle for measuring the altitude of objects lying due east or west from hence. In a southerly direction from the great equatorial dial are two buildings exactly alike, both for observing the altitude and *azimuth* of the stars, each apparently intended to correct the other. The whole collection of instruments shows astronomical knowledge of a very high order.

The road to Delhi enters the town sideways at the Lahore gate. Outside the Delhi gate of the city near the Mathrah road is a tall column known as Fíroz Sháh's Lát. It was formerly surrounded by the city of Fírozábád, but that city is merely a ruin without inhabitants. The pillar is a sandstone monolith placed on a pyramidal building of rubble stone. It is 42 feet high, of which 35 feet towards the summit are polished, and the rest is rough. The upper diameter is 25 inches, and lower 38 inches. The colour of the stone is pale pink, and it resembles dark quartz. The chief point of interest about this monolith is that the inscription on it forms part of the edicts of Asoka, king of Magadha, by which he proclaimed his talents to the world. This pillar forms one of a series erected by him from Kábul to Orissa. There is also another pillar on the ridge inscribed with one of the edicts of king Asoka. He lived about 250 B.C. Further along the Mathrah road is Purána Kila or Indrapat, supposed to be the site of the most ancient site of Delhi.

Still further along the same road is the tomb of Humáyún which was finished in 1865 at a cost of 15 lakhs of rupees. Besides the tomb of Humáyún himself, this mausoleum contains the graves of many others of the house of Timour. This tomb of the first hereditary monarch of the Mughal race may be remembered as being the spot where Bahádur Sháh, the last Mughal Emperor of Delhi, surrendered himself to the British Government after the capture of Delhi during the Mutiny, and in sight of which his sons and nephew were summarily executed for murder and treason by Hodson.

The tomb of Humáyún stands near the old bed of the Jamna in the centre of a high-walled enclosure. On the west and south are two lofty tower-like gateways, which add much to the grandeur of the building. The gateways are built of grey stone ornamented with bands of red stone and marble. In the centre of the garden is a platform 5 feet high and 100 yards square, surmounted by a second platform 20 feet high and 85 yards square. In the centre of the floor of the upper platform are the graves of Húmáyún, and of the other Mughal princes just described. Above these graves is erected the mausoleum, the centre room of which is a square of 45 yards. It is built of red sandstone and is ornamented with marble bands. The form of the main body of the tomb is that of a square with the

Objects of interes in the neighbour-hood.

corners cut off, that is to say an octagon with four short and four long sides. Each of the short sides forms one side of four octagonal cornered towers. The tomb itself is a lofty square tower surmounted by a magnificent marble dome topped with a copper pinnacle standing 140 feet from the level of the terrace. The corner towers are two-storeyed, and round these towers and the centre room in the upper storey there runs a narrow gallery. The roof is oval, and is about 80 feet in height, and formed by the dome.

The college, which is on the roof of the tomb, was at one time an institution of some importance, and men of learning and influence used to be appointed to the charge of the place. It has, however, long ceased to maintain its reputation, and for the last 150 years has been completely abandoned. In the south-east corner of the garden is a small tomb, the history of which is unknown. It stands on a terrace 8 feet high and 76 feet square, paved with red sandstone. The tomb itself is about 40 feet square, and 72 feet high to the top of the dome. The tomb inside is about 24 feet square, and has one entrance on the south. There are two marble monuments on the tomb covered with engravings of verses from the Kurán. The tomb is built almost entirely of red and grey sandstone.

There are two small tombs of great interest within a few minutes walk of the mausoleum of the Taimuria family. The following extract is from the *Archæology of Delhi* :—

"The village of Nizám-ud-dín is within five miles of modern Delhi; it is entered by a lofty stone and masonry gateway, on either side of which there are rooms now occupied as a school. On the right of the visitor, as he enters the village, is the mausoleum known as the *chausat khambah*; further on, still on his right, are the graves of the queens, the daughters and nieces of Akbar II. Turning to his left, the visitor arrives at a low gateway through which he enters a stone paved enclosure about 60 feet square; on his left, is a room now occupied as a school with a grave in it, and on his right is the tomb of Khusrau. On the north of this court is another walled enclosure, paved with marble, which contains the tomb of Nizám-ud-dín. This enclosure is about 48½ yards long and 19½ yards broad, and within its walls are the graves of Jahánárá Begam, Muhammad Sháh and Mírzá Jahángír, and the mosque known as Jamáa'th Khanah."

Mr. Carr Stephen gives the following catalogue of the members of the Delhi Royal family who are buried in this mausoleum :—

"The tomb of Humáyún may be regarded as the general dormitory of the House of Taimúr; for, although Akbar and his three immediate successors are buried elsewhere, no other mausoleum contains so many distinguished dead who belong to the Mughal dynasty. Round the grave of Humáyún are interred Hají Begam, his wife, and the companion of his many troubles; the headless body of Dárá Sheko, the accomplished and chivalrous but ill-fated son of Sháh Jahán; the Emperor Muhammad, Azam Sháh, the brave but unwise son of Aurangzeb, who fell in battle against his brother before Agra; the Emperor Jahándár Sháh, the grandson of Aurangzeb, and his unfortunate successor, Farokhsyar, who was poisoned by his prime minister; the youthful Rafí-ud-darját and Rafí-ud-daulah, each of whom in succession assumed imperial dignity only to relinquish it after an unimportant reign of three months; and last, though not the least, Alamgir II, who was assassinated at the instigation of his prime minister, 'Imád-ul-Mulk. Other royal princes and princesses, and their attendants and retainers, sleep close to the illustrious few whose names are preserved in history."

Chapter VI.

Towns, Municipalities and Cantonments.

Objects of interest in the neighbourhood.

Further along the Mathrah road, and somewhat to the right of it going from Delhi, is the fort and city of Tughlakábád. It was finished in 1323. It is in the shape of a half hexagon, the three sides being about $\frac{3}{4}$ mile each in length and the base $1\frac{1}{2}$ miles. The circuit of the city is about 4 miles. The fort stands on a rocky height surrounded by ravines. The walls of the fort are built of massive blocks of stone of great thickness. The rock on the southern face is scarped, and the walls above rise to a mean height of 40 feet. In the south-west angle is the citadel, occupying about $\frac{1}{6}$ of the area of the fort. It contains the ruins of a large palace. The citadel is strongly defended by ranges of towers and bastions, within which were the private apartments of the Emperor. The fort of Tughlakábád has 13 gates, and the citadel 3 inner gates. It contains seven tanks for water, and three *báolis* still in good order. There are apartments underground at a depth of from 30 to 80 feet, probably for use in the hot weather. The upper part of the Fort is full of ruined houses, while the lower part seems never to have been fully inhabited. Tughlakábád formerly belonged to the Rájá of Ballabgarh, but was annexed owing to the Rájá's participation in the Mutiny. It is now an insignificant Gújar village, owing all its importance to the grandeur of its ruins. There is a metalled road from here to the Kutab.

Such is a short sketch of some of the principal monuments around Delhi. To describe all at length would require a separate volume, but the most important have been touched upon. For this purpose great assistance has been received from Carr Stephen's book, *Archæology of Delhi*, in which a full account will be found of every monument of interest around Delhi.

Taxation, trade, &c.

The Municipality of Delhi was first constituted in 1863. It is now a Municipality of the first class. The Committee consists of the Deputy Commissioner as president, with five other official members, including the Vice-President, and 15 non-official members. The non-official members are appointed by Government on the nomination of the Deputy Commissioner, subject to the approval of the Commissioner of the division. Table No. XLV shows the income of the Municipality for the last few years, while Table XLVA gives details of manufactures. The income is chiefly derived from octroi, levied at various rates on the value of almost all goods brought within municipal limits, grain and piece-goods being excepted. Certain *nazúl* property, in the hands of the Municipality, also yield a considerable income.

Delhi is the great commercial centre for the eastern part of the Panjáb, Rájpútána and the neighbouring districts of the North-Western Provinces. An important item of the export trade is leather and hides, and also *ghi*. Raw cotton is largely collected here, and forwarded to Bombay and Calcutta for exportation to England. Cotton thread is re-imported from Europe and worked up into *pagris* and *dopattas*. In the case of European piece-goods—another very important article of traffic—and European glass and China ware, the process is reversed, Delhi being the most important market for distribution in the north-western parts of India. Beyond the limits of the province, the export dealings of Delhi are

Chapter VI.

Towns, Municipalities and Cantonments.

Taxation, trade, &c.

principally with Sind, Kábul, Alwar, Bikaner, Jaipur, and the North-Western Provinces. Of Panjáb towns, Rewári, Hissár, Ludhiánáh, Lahore, Amritsar, Ambála, Jalandhar, Ferozepur, Multán, and Peshâwar, all have extensive dealings with the great Delhi houses. European enterprise is represented by the Delhi, and a branch of the Bengal Bank, and by the agents of two or three firms of cotton merchants. There is a considerable through traffic in *charas* coming from Dera Ghâzi Khán, and passing through to Calcutta without breaking bulk. Most of the *charas* for consumption in the city is brought from Amritsar. There is a considerable importation of gold and silver in bars, which is used in the city in the manufacture of gold and silver fancy-work and ornaments. In food grains the export is principally in a southern direction; little going north. With regard to metal, copper and brass in sheets, and iron wrought and unwrought are imported from Europe; but most of that imported is disposed of in the city for local requirements. Gold also is imported. There are some manufactories in the city, but they do little more than supply the wants of the district. *Ghi* is largely imported principally for the requirements of the city.

Year.	Imports.	Exports.
1876-77 ...	79.61.488	95.52.408
1877-78 ...	2.95,39,266	1,25.76.366
1878-79 ...	2.82,07,193	1,16.51,751
1879-80 ...	2.22.72,993	98.74.125
1880-81 ...	3,94,74,640	3,44,18,500

The principal manufactures of the city are native shoes, for which the demand is very large; and fancy silver work. In the latter trade, several very wealthy firms are engaged. A more detailed notice of some of the industries of the town will be found in Mr. Kipling's note given at pages 124 to 138. Table No. XLVA gives details of the manufactures of the town, as they stood in 1881-82, and the figures in the margin show total imports and exports for the last few years; but the figures are of very doubtful accuracy. Further information will be found in the trade reports.

Of its special industries, perhaps the most famous is the production of jewellery, gold and silver lace, real and imitation, and tinsel work in all its branches; but there is probably no trade known in India that has not its representatives in the city. The Delhi jewellery is especially famous, but is losing much of its interest by reason of excessive imitation of European models. Ths characteristic articles of the Delhi jewellery are turquoise brooches, bracelets, and filagree work in gold and silver. This branch of industry received a great blow in 1857 by the removal of the Royal family and its retainers from the city, Large sums of money, which had formerly been spent annually upon decorations, personal and otherwise, now ceased to find their way into the *bázár*, the result being to paralyze the energies, and eventually diminish the numbers of artificers.

Institutions and public buildings.

The most important public buildings have been described above. Near the Jáma Masjid is the civil hospital with accommodation for a large number of patients. The Delhi College is a white building with a lofty colonnade. The Institute, described above, is a fine building containing the Darbár Hall with a public library and reading rooms. In front of this building, in the centre of the Chándni Chauk, is a lofty clock-tower with four faces. The remaining public

Chapter VI.

Towns, Municipalities and Cantonments.

Institutions and public buildings.

buildings are the *kotwáli*, the Commissioner's Office (adjoining his private residence), the district offices, the railway station, telegraph office and post office. The latter occupies a building known as the magazine. There are several excellent shops, the Banks of Bengal and Delhi, and the Northbrook, Great Eastern, and United Service Hotels. There is a local paper published in English entitled the *Punjab Herald*. Near the East Indian Railway Station is a building known as the Mor Serai, used partly as a bonded warehouse, and partly as a habitation for poor Europeans. Within the city there are other *serais*, *tahsíl* offices, a dispensary with several branches, a central police *thána* with several other *thánas*, several branch post offices, and a high school. Outside the Ajmir Gate are the police lines. There are a number of schools of various kinds in the city described under the head of education. The public gardens, known as the Kudsia Bágh, are situated just outside the Kashmír Gate, and inside are the Queen's Gardens occupying a considerable space, and giving an appearance of freshness and verdure to Delhi not often met with in a native town. There is nothing especial to remark about the cantonments. In the fort are several handsome buildings, but they are of a period prior to the cantonments, and have been described above.

Population and vital statistics.

The population, as ascertained at the enumerations of 1868, 1875, and 1881 is shown below:—

Limits of Enumeration.	Year of Census.	Persons	Males.	Females.
Whole town ...	1868	1.54,417	83.346	17,071
	1881	1,73,393	93,163	80,228
Municipal limits ...	1868	1.54,417	...	...
	1875	1,60,553	...	...
	1881	1,73,393	...	...

It is difficult to ascertain the precise limits within which the enumerations of 1868 and 1875 were taken; but the details in the margin, which give the population of suburbs, throw some light on the matter. The figures for the population within municipal limits according to the Census of 1868 are taken from the published tables of the Census of 1875; but it was noted at the time that their accuracy was in many cases doubtful. The Deputy Commissioner wrote as follows in the district report on the Census of 1881 regarding the increase of polulation:—

Town or Suburb.	Population.	
	1868.	1881.
Delhi City excluding Cantonments	1,11,053	1,17.363
Cantonments		3,148
Pahári Dhiráj	43,364	18,144
Pahárganj		10,290
Teliwára		5,488
Mughalpurá		5,393
Sabzi Mandi		2,195
Pul Mithái		2,015
Nabbí Karím		1,843
Jaisinghpurá		1,761
Shídípur		1,249
Khandrát kalán		821
Madhoganj		674
Minor Suburbs		2,181
Civil Lines		828

"The increase in the city and suburbs of Delhi is partly owing to improvement in trade, and partly to the opening of two new lines of Railway, *viz.*, the Sind, Panjab and Delhi Railway, and the Rájpútána State

Railway, each having its terminus at Delhi. The better attention paid of late years to conservancy and sanitation mnst also have tended indirectly to increase the population by causing a reduction in the rate of mortality. As might have been expected, the increase was proportionately larger in the suburbs where there is more room for expansion than in the city. The population of the former increased by nearly 20 per cent., while that of the city has increased by 9·4 per cent. only. The following table which distinguishes religions, is interesting especially as showing the effect of the Mutiny upon the Muhammadan population. At the time of the Census of 1853, although the population of the Palace (estimated in 1844 to be about 14,000 souls), appears not to have been included in the returns, yet there must have been a large number of hangers-on of the Royal Family, residing outside the Palace. These would necessarily have disappeared before 1868. Again, to say nothing of the number of Muhammadans actually killed in 1857, it must be remembered that every Muhammadan was expelled for a time from the city after its capture, and it was only by degrees that the city became completely re-populated. So, too, large numbers of trades-people who had driven a thriving trade in supplying the wants of the Palace and its retainers, quitted the city after the expulsion of the Royal Family."

Chapter VI.

Towns, Municipa-lities and Canton-ments.

Population and vital statistics.

Year.	Place.	Christians, &c.	Hindus.	Muhammadans.	Total.
1847	City ...	327	71,530	66,120	1,37,977
	Suburbs ...	......	15,615	6,687	22,302
		327	87,145	72,807	1,60,279
1853	......	......	......	......	1,52,426
1864	City ...	1,547	61,324	39,434	1,02,332
	Suburbs ...	......	22,022	17,374	39,376
		1,547	83,346	56,808	1,41,708
1868	City ...	......	......	......	1,11,015
	Suburbs ...	......	......	......	43,402
		......	......	......	1,54,417
1875	City ...	......	......	......	1,15,992
	Suburbs ...	......	......	......	44,561
		......	......	......	1,60,553
1881	City ...	1,521	68,172	51,782	1,21,475
	Suburbs ...	307	30,874	20,737	51,918
		1,828	99,046	72,519	1,73,393

The constitution of the population by religion and the number of occupied houses are shown in Table No. XLIII. Details of sex will be found in Table XX of the Census Report of 1881. The annual birth and death rates per mille of population since 1868 are given on the next page, the basis of calculation being in every case the figures of the most recent Census.

The actual number of births and deaths registered during the last five years is shown in Table No. XLIV.

Najafgarh town.

Najafgarh is a small place of about 4,000 inhabitants in the Dehli *tahsil*, about 17 miles from Dehli by direct road, and 18 *vid*

Chapter VI.

Towns, Municipalities and Cantonments.

Population and vital statistics.

Year.		Birth Rates.			Death Rates.	
	Persons.	Males.	Females.	Persons.	Males.	Females
1868 ...	...	...	...	42	37	47
1869 ...	...	...	...	67	63	72
1870 ...	40	39	41	75	74	73
1871 ...	86	87	85	85	83	86
1872 ...	80	42	36	94	91	97
1873 ...	74	39	35	94	88	100
1874 ...	83	43	40	77	72	83
1875 ...	100	53	47	94	89	99
1876 ...	101	52	49	75	71	80
1877 ...	108	54	51	91	85	98
1878 ...	83	47	45	163	153	173
1879 ...	60	33	29	131	124	140
1880 ...	76	39	36	67	65	69
1881 ...	114	59	54	85	83	86
Average ...	88	46	42	92	88	96

Najafgarh town.

Nangloi which is the best road. In the latter case there is a metalled road as far as Nangloi, about 10 miles, and the rest is unmetalled. It is accessible with difficulty in the rains, as portions of the road are flooded. The town itself is well wooded, and consists of a collection of native houses with three metalled *bázárs*, many of the houses in which are built of brick. Two of these *bázárs* are parallel and the third connecting them forms rather a square than a street.

There is a *thána*, school-house, and dispensary in the town The *thána* is an old building, and worth a passing notice. There is an old gateway on the Delhi direct road, which is also a fine building. The Municipal Committee consists of seven members nominated by the Deputy Commissioner with the Commissioner's approval. Its income for the last few years is shown in Table No. XLV, and is principally derived from an octroi tax. The place is really of no importance, and merely happens to be the largest village in the neighbourhood. A metalled road is being made direct between Delhi and Najafgarh, which when finished will no doubt increase its importance. There is a police rest-house at some little distance from the town in the centre of what was formerly a garden. It is used by the district officers. There are very fine *ber* trees in Najafgarh; their fruit is said to weigh five *tolas* to a single *ber*; there is a special family here of Muhammadans, called *Mirdhas*, who are traditionally measurers of land and crops. They do not get much of this work now, but they claim to have done it in the time of the Muhammadan kings. The population, as ascertained at the enumerations of 1868, 1875, and 1881, is shown below:—

Limits of Enumeration.	Year of Census.	Persons.	Males.	Females.
Whole town ...	1868	3,768	1,774	1,994
	1881	3,999	2,049	1,950
Municipal limits ...	1868	3,592	...	...
	1875	4,309	...	...
	1881	3,999	...	...

Chapter VI.

Towns, Municipalities and Cantonments.

Najafgarh town.

It is difficult to ascertain the precise limits within which the enumerations of 1868 and 1875 were taken. The figures for the population within municipal limits according to the Census of 1868 are taken from the published tables of the Census of 1875; but it was noted at the time that their accuracy was in many cases doubtful. It would appear from information supplied by the Deputy Commissioner that, since 1868, the suburb of Dijáwan Khurd has been brought within Municipal limits. Its population, however, is only 176. The constitution of the population by religion and the number of occupied houses are shown in Table No. XLIII. Details of sex will be found in Table XX of the Census Report of 1881.

Sunipat town.

Sunipat is a town of 13,000 inhabitants situated 28 miles north of Delhi. It is approached from the Grand Trunk Road by two metalled roads from the north-west and south-west, each about five miles long. There is a direct road from Delhi, the old Imperial road, but now not much used. The town is surrounded by trees, and in the centre is an eminence on which is situated the *tahsíl* and *thána*, the former flanked by four small towers. On this eminence is also situated the dispensary, shortly to become the Munsiff's Court, a new dispensary having been built just outside the town. Near to the *tahsíl* is the school house. Other prominent objects in the town are the spires of the two Saráogi temples. The Municipal Committee, ten in number, have also a house where they hold their meetings. This house is also used as the Honorary Magistrate's *katcheri*; but when the new dispensary is opened, it is expected that a room in the former dispensary will be allotted to them. Its income for the last few years is shown in Table No. XLV, and is mainly derived from an octroi tax. The town is very distinctly divided according to the tribes inhabiting it. The most prosperous portion is that occupied by the *banias*, who possess several handsome houses in their quarters and a *bázár* which appears to thrive. There are no manufactures, but there is a considerable traffic in cloths and metalware brought here from Delhi for distribution. It forms a market for a circuit of seven or eight miles. The population is fairly equally divided between Hindus and Muhammadans, mainly Saiyads. A new canal is about to be opened about three miles off, which it is hoped will increase the prosperity of the agriculturists about Sunipat. In the neighbourhood are some ancient Patháns tombs, one of which has been converted into a rest-house.

In former years the Jamná appears to have flowed under the walls of Sunipat. It is a town of great antiquity, and was founded apparently by the early Aryan settlers. Popular tradition, accepted as true by General Cunningham, identifies it as one of the five *pats* mentioned in the Mahábhárat, as demanded by Yudisthira from Daryodhana as the price of peace. Its foundation would thus be placed before the war of the Mahábhárata. The point is, however, doubtful, and Syad Ahmad believes that it was founded by Rája Soni, 13th in descent from Arjuna, brother of Yudisthira. The town is picturesquely situated on the side of a small hill, which, standing out as it does in a level plain, is evidently formed

Chapter VI.

Towns, Municipalities and Cantonments.

Sunipat town.

from *débris* of buildings that have crumbled to decay on this one site during the town's long life of 3,000 years. In 1866 the villagers, while digging a well from the top of the hill, excavated from a depth of some 70 or 80 feet below the surface a terra-cotta figure of the sun in perfect preservation. General Cunningham pronounced this image to be at least 1,200 years old. In 1871 a hoard of some 1,200 Greco-Bactrian hemi-drachms were also unearthed at Sunipat. The present town is about one square mile in extent. One part is called the Kot, on top of which stand the *thána* and *tahsíl*; while the other part is known as the Mashhad, or place of martyrdom, where it is said that Nasir-ud-dín met his death at the hands of a Hindu Rája. The population, as ascertained at the enumerations of 1868, 1875, and 1881 is shown below :—

Limits of Enumeration	Year of Census.	Persons.	Males.	Females.
Whole town ...	1868	12,176	5,948	6,228
	1881	13,077	6,449	6,628
Municipal limits ...	1868	12,176	...	...
	1875	13,637	...	...
	1881	13,077	...	...

It is difficult to ascertain the precise limits within which the enumerations of 1868 and 1875 were taken. The figures for the population within municipal limits according to the Census of 1868 are taken from the published tables of the Census of 1875; but it was noted at the time that their accuracy was in many cases doubtful. The Deputy Commissioner in the District Report on the Census of 1881 accounts for the decrease of population by the absence of several large wedding-parties on the night of the last Census. The constitution of the population by religion and the number of occupied houses are shown in Table No. XLIII. Details of sex will be found in Table XX of the Census Report of 1881. The annual birth and death rates per mille of population since 1868 are given below, the basis of calculation being in every case the figures of the most recent Census :—

Year.	Birth Rates.			Death Rates.		
	Persons.	Males.	Females.	Persons.	Males	Famales.
1868 ...	...	...	...	8	9	8
1869 ...	...	...	...	14	16	12
1870 ...	31	34	28	40	42	38
1871 ..	32	37	28	32	35	28
1872 ...	22	18	14	30	35	26
1873 ...	26	16	10	36	36	35
1874 ...	34	20	15	40	45	35
1875 ...	35	20	15	30	32	28
1876 ...	26	15	11	27	26	29
1877 ...	31	18	35	23	25	21
1878 ...	31	18	13	25	26	24
1879 ...	23	12	10	43	45	40
1880 ...	27	13	14	22	24	20
1881 ...	38	21	17	26	26	25
Average.	30	17	15	30	32	28

Chapter VI.

Towns, Municipalities and Cantonments.

The actual number of births and deaths regstered during the last five years is shown in Table No. XLIV.

Town of Farídábád.

Farídábád is a small town of 7,500 inhabitants, about 16 miles south-west of Delhi. It is approached from the Delhi-Mathrah road by two short branches south-east and north-east, each about a mile in length. The two are continuous, and form a loop going through the main *bazaar* of the town. The main *bazar* is a fairly broad street with houses built of brick on each side. About half way along this *bazaar* another *bazaar* branches out on one side leading past the post office, school, rest-house and dispensary to a large house belonging to the *zaildár*. It is a handsome collection of buildings with a mosque attached, partly in the European style. Opposite where this *bazar* branches off is a large mosque with a tank in front of it, built by one Shaikh Faríd from whom the town derives its name. There is a *tháṇa* and the remains of an old *serai*. The Municipal Committee consists of eight members, appointed by the local Government on the joint recommendation of the Commissioner and Deputy Commissioner. Its income for the last few years is shown in Table No. XLV, and is derived from an octroi tax. Just outside the town is a large tank, partly *packka*, but somewhat choked up with mud. In this town the Hindus slightly preponderate. With the exception of the main *bazaar*, the houses are mostly of mud and mean in appearance. There is no trade in the town, nor is there likely to be, as it is off the main road. Farídábád is said to have been founded in 1607 A.D., by Shekh Faríd, treasurer of Jehángir, for the purpose of protecting the high road, which passes through the town, from robbers. He built a fort, tank, and *masjid*. In later times it was the head-quarters of a *parganah*, which was held in *jágír* by the Rája of Ballabgarh, till it was resumed on the confiscation of his states after the Mutiny. The population, as ascertained at the enumerations of 1868, 1875 and 1881 is shown below:—

Limits of Enumeration.	Year of census.	Persons.	Males.	Females.
Whole town ...	1868	7,990	4,092	3,898
	1881	7,427	3,804	3,623
Municipal limits ...	1868	7,990	...	...
	1875	7,583	...	...
	1881	7,427	...	...

It is difficult to ascertain the precise limits within which the enumerations of 1868 and 1875 were taken. The figures for the population within municipal limits according to the Census of 1868 are taken from the published tables of the Census of 1875; but it was noted at the time that their accuracy was in many cases doubtful. The Deputy Commissioner wrote as follows in the District Report on the Census of 1881 regarding the decrease of population: "The "decrease in Farídábád is easy of explanation. In the years 1871, "1872 and 1873, the death-rate was very high; in the last year it "rose to 98 per mille, owing to an outbreak of fever. The town is not "prospering. Since the diversion of the Delhi and Mathrah road,

Chapter VI.

Towns, Municipalities and Cantonments.

"which formerly passed through it, its trade has suffered, and the "place is less frequented than formerly." The constitution of the population by religion and the number of occupied houses are shown in Table No. XLIII. Details of sex will be found in Table XX of the Census Report of 1881.

Town of Ballabgarh.

Ballabgarh is a town of 5,800 inhabitants, 22 miles from Delhi along the Delhi-Mathrah road, on the east side of the road. It is the head-quarters of a *tahsíl*, and possesses a *thána*, school, distillery and dispensary. For the purpose of describing the town, it may be divided into two parts, the town proper and the fort outside the town and between it and the main road. The town itself is a collection of mean houses, but has two broad *bazaars* crossing one another at right angles, and forming a small square in the centre. From these *bazaars* issue smaller streets, but all at right angles to the main *bazaars* with a wall at the end of each. The town is said to have derived its regular shape from having been built on the model of Jaipur. There is an encamping ground on the main road. The Municipal Committee consists of eight members appointed by the local Government on the joint recommendation of the Commissioner and Deputy Commissioner. Its income for the last few years is shown in Table No. XLV, and is derived from an octroi tax. The fort, which is outside the town, contains the palace of the former Rájá. He was hung for lukewarm conduct in the Mutiny, and his estate confiscated. His wife now lives in the town on a pension of Rs. 500 a month. The palace consisted of several houses, of which all except one have fallen to ruins. This is a square, two-storeyed building built of white sandstone, with carved doors and a courtyard in the centre. On one side is the *tahsíl* with the treasury, and on the other the Munsiff's Court, and above this the police post house. Outside this is a building now used as a *thána*. The fort is surrounded by a stone wall about 30 feet high. The town is inhabited mostly by agriculturists, and is said to have fallen off much in importance since the absorption into British territory.

*Ballabgarh** is not an ancient town at all. The earliest account of its becoming important shows that in 1705 Gopál Singh, a Tawátia Ját *zamíndár* of the village Aláwalpur, came over and settled in Síhi near Ballabgarh, having turned out the Tagah cultivators of that place. As he waxed strong by plundering travellers on the Mathrah road, which passes by Síhi, he was able to attack Amjad, the Rájpút Chaudhrí, and with the aid of the Gújars of Tigáon to kill him. Murtaza Khán, the local Government officer of Farídábád, tried to make matters quiet by appointing Gopál Singh Chaudhri of the Farídábád *parganah*, with a cess of one anna in the rupee on the revenue. This was in 1710. In 1711 Gopál Singh died, and was succeeded by his son Charandás. Charandás, seeing how weak the imperial grasp was growing even in the nearer districts, appropriated the revenue and openly refused to make it over to Murtaza Khán. He was, however, seized, and in 1714 imprisoned by the latter in Farídábád fort, and he remained there some little time till his son Balrám, duping

* The name is probably a corruption from Balrámgarh, the fort of Balrám, its founder.

the Muhammadan officer, under pretence of paying a ransom, set him at liberty.* Father and son then obtained the aid of the Bhartpur Rája Súrajmal and killed Murtaza Khán. The ascendancy of the Bhartpur chief continued down to 1738; in the next year the Delhi king gave the titles of Naib Bakhshí, and Ráo to Balrám, and it was to celebrate the acquisition of these honours that Balrám built the stone fort-palace of Ballabgarh. But he was not allowed long to enjoy his rank, for he was killed in return for his murder of Murtaza Khán by the son of his victim Akibat Mahmúd. His sons Kishan Singh and Bishan Singh remained in possession of the Ballabgarh fort, and they were in 1762 nominated *killádár aur názim* of this *parganah* by the Mahárájá of Bhartpur. In 1774, however, he dismissed them from his service, and they died just at the same time. Next year Ajìt Singh, son of Kishan Singh, and Híra Singh, son of Ráo Kishandás, presented themselves before the Emperor at Delhi, and agreed to deliver possession of the Ballabgarh *parganah* to the royal authority. Accordingly Najaf Khán of the imperial establishment was deputed to take it. Ajít Singh was appointed *killádár* and *názim* of Ballabgarh, while Híra Singh was taken away by the Nawáb Najaf Khán to Agra. The next year he came back, and Ajít Singh was formally entitled Rája, and Hírá Singh was called Rája and also 'Sálár Jang.' The revenue of Ballabgarh was estimated at Rs. 1,20,000, and it was made an *istimrár* tenure of 60,000 rupees. Meanwhile the administration of the country had come into the hands of Mádhoji Scindia, and he remitted the amount taken as *istimrárí*. In 1793 Ajít Singh was murdered by his brother Zálim, but was succeeded by his son Bahádar Singh. In 1803 on the approach of General Lake, Bahádar Singh sent his son Pirthi Singh, and Hírá Singh sent his son Gangá Parshád to the English army. Pirthi Singh was killed at the fight at Dara Mukandra, and Ganga Parshád ran away. It appeared that Híra Singh was in collusion with the Mahrattas, and he was therefore turned out of office, Bahádar Singh being confirmed in it, 12th December 1804, and received next year the grant of *parganahs* Páli and Pákal in return for undertaking the police arrangements of the road. This Rájá built the town of Ballabgarh, which is also called Rámganj.

Bahádar Singh died in 1806. Naráyan Singh, his son, succeeded, but died also in the same year. Anrúd Singh took the Ráj, and ruled till 1818. His minor son Sáhib Singh came next, and the widow of Anrúd Singh built a *chhatri* in memory of her deceased husband, with a *pakka* tank. Sáhib Singh died childless in 1825, and was succeeded by his uncle Rám Singh. In the time of this prince the *parganah* of Páli Pákal was resumed by the Government, the

* The story goes that he promised to pay a large amount in cash directly his father was freed. To carry out the agreement it was stipulated that the captive should be set at liberty directly the silver came into the hands of his captors. He was brought guarded to the side of the Tank near Ballabgarh, and when the cart bringing the treasure had come up, and one or two bags of rupees had been examined, Charandás was let go. He immediately made off on a fleet horse with his son. The other bags were found to contain *paisa*.

Chapter VI.

Towns, Municipalities and Cantonments.

Town of Ballabgarh.

Magistrate of Delhi undertaking the charge of the police of the environs of the city (1827). Farídábád meanwhile was left in his charge, and he was considered responsible for maintaining the public peace on the Mathrah road between the limits of Burhiyáká-pul, and *mauzá* Pirthala in Palwal. Rám Singh died in 1829, and Náhar Singh, his son, came to power. The earlier years of his reign saw great mischief and intrigue, caused by Abhe Rám and Pirthi Singh, the ministers, through whose mismanagement debts were contracted on account of the Estate. "In 1839 Ábhe Rám was dismissed, and "Nawal Singh, the maternal uncle of Náhar Singh, having come into "power, he ejected Pirthi Singh also, and in conjunction with Rám-"parshad, nephew to Deo Kanwar, became the actual ruler, though "all acts continued to be done in the name of Rája Náhar Singh."

In 1840 Nawal Singh becoming absolute, disputes ran high, and disorganisation increasing, the British Agent was appealed to, and our interference sought. Enquiries were instituted through a special Commissioner, deputed to Ballabgarh, and the management of the territory was experimentally entrusted to Kanwar Mádho Singh, a grand-nephew of Rája Bahádar Singh, the first chief (within the time of our influence); but the plan failed, and *parganah* Farídábád was taken under direct British management. The yonng Rája however, protested against this arrangement, and as he had attained his majority, and urged his competency to manage his own affairs, the territory was restored to him. Yet, after a long reign, he was implicated in correspondence with the mutineers in 1857, and was hanged. The *ráj* was confiscated, but the Rání dowager, Rání Kishan Kanwar, was allowed to reside in Ballabgarh, and she has recently bought the *zamíndári* rights from Government for Rs. 64,500. She herself gets a pension of Rs. 500 a month.

Limits of Enumeration.	Year of Census.	Persons.	Males.	Females.
Whole town	1868	6.281	3,175	3,106
	1881	5,821	3.114	2,707
Municipal limits ...	1868	6,281	......	......
	1875	6,671	......	......
	1881	5,821	......	......

The population, as ascertained at the enumerations of 1868 1875, and 1881 is shown in the margin.

It is difficult to ascertain the precise limits within which the enumerations of 1868 and 1875 were taken. The figures for the population within municipal limits, according to the Census of 1868 are taken from the published tables of the Census of 1875; but it was noted at the time that their accuracy was in many cases doubtful. The Deputy Commissioner wrote as follows in the District Report on the Census of 1881 regarding the decrease of population :—

"In Ballabgarh the rate of mortality was also high, especially during 1872, when it rose to 64 per mille. The population, however, seems soon to have recovered itself, as in 1875 it amounted to 6,671, or 390 more than in 1868. Between 1875 and 1881 it fell to 5,821, that is, 460 less than it

Chapter VI.

Towns, Municipalities and Cantonments.

Town of Ballabgarh.

was in 1868. This decrease is not so easily accounted for. One reason assigned for it is the cessation of Settlement operations. Ballabgarh being the head-quarters of the *tahsil*, large numbers of persons, including the Settlement *amla*, *patwáris*, their families, and persons interested in Settlement operations, not permanently residing in the town, were collected there when the Census was taken in 1875. The absence of these persons in 1881 would, however, scarcely account for such a large decrease as 850, or nearly 13 per cent. in the population during the intervening six years."

The constitution of the population by religion, and the number of occupied houses are shown in Table No. XLIII. Details of sex will be found in Table XX of the Census Report of 1881.

STATISTICAL TABLES

APPENDED TO THE

GAZETTEER

OF THE

DELHI DISTRICT.

(INDEX ON REVERSE).

"ARYA PRESS," LAHORE.

STATISTICAL TABLES.

Table No. II, showing DEVELOPMENT.

1	2	3	4	5	6	7
DETAILS.	1853-54.	1858-59.	1863-64.	1868-69.	1873-74.	1878-79.
Population ..	..	..	..	6,21,565	..	6,43,515
Cultivated acres ..	..	..	..	5,25,255	5,32,874	5,25,676
Irrigated acres ..	..	..	..	2,06,853	2,13,192	1,75,722
Ditto (from Government works) ..	..	..	..	1,22,173	1,18,615	95,346
Assessed Land Revenue, rupees ..	..	..	..	9,39,669	9,40,234	9,69,900
Revenue from land, rupees ..	..	..	..	8,70,681	8,88,184	8,76,934
Gross revenue, rupees ..	..	..	..	11,01,382	44,64,756	13,20,120
Number of kine ..	..	..	..	1,51,494	1,59,500	1,65,627
,, sheep and goats ..	..	..	..	50,982	53,088	36,000
,, camels ..	..	..	..	718	600	295
Miles of metalled roads ..	..	..	..	441	71	116
,, unmetalled roads ..	..	..	..		370	293
,, Railways ..	..	..	..	2	12	12
Police staff ..	..	..	1,007	1,145	1,069	1,164
Prisoners convicted ..	..	..	1,598	1,751	2,937	2,601
Civil suits,—number ..	..	3,341	3,777	5,083	7,139	7,317
,, —value in rupees ..	..	2,10,361	5,73,958	9,87,933	5,70,486	7,13,774
Municipalities,—number ..	..	..	..	..	5	5
,, —income in rupees ..	..	..	..	2,65,780	2,75,322	2,31,402
Dispensaries,—number of ..	..	..	..	2	4	8
,, —patients ..	..	..	..	18,941	22,002	44,807
Schools,—number of ..	..	..	99	98	101	113
,, —scholars ..	..	..	4,306	3,655	4,863	6,009

NOTE.—These figures are taken from Tables Nos. I, III, VIII, XI, XV, XXI, XLI, XLV, L, LIX, and LXI of the Administration Report.

Table No. III, showing RAINFALL.

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
	ANNUAL RAINFALL IN TENTHS OF AN INCH.																	
Rain-gauge station.	1866-67.	1867-68.	1868-69.	1869-70.	1870-71.	1871-72.	1872-73.	1873-74.	1874-75.	1875-76.	1876-77.	1877-78.	1878-79.	1879-80.	1880-81.	1881-82.	1882-83.	Average.
Delhi ..	335	327	242	218	237	299	351	389	217	384	245	150	360	364	296	250	273	290
Sadar ..	..	..	..	..	..	337	385	401	233	423	209	172	226	383	308	273	321	314
Sonepat ..	148	290	113	233	350	208	310	274	304	342	260	161	193	232	298	249	219	240
Ballabgarh ..	322	313	174	242	170	272	253	290	240	320	172	145	205	308	257	245	245	245

NOTE.—These figures are taken from the weekly rainfall statements published in the *Punjab Gazette*.

Table No. IIIA, showing RAINFALL at head-quarters.

1	2	3	1	2	3
	ANNUAL AVERAGES.			ANNUAL AVERAGES.	
MONTHS.	No. of rainy days in each month—1867 to 1876.	Rainfall in tenths of an inch in each month—1867 to 1881.	MONTHS.	No. of rainy days in each month—1867 to 1876.	Rainfall in tenths of an inch in each month—1867 to 1881.
January ..	2	6	September ..	5	50
February ..	1	5	October ..	1	7
March ..	2	9	November ..	..	..
April ..	1	3	December ..	1	7
May ..	3	9	1st October to 1st January ..	2	14
June ..	4	24	1st January to 1st April ..	6	20
July ..	9	87	1st April to 1st October ..	29	237
August ..	7	64	Whole year ..	37	272

NOTE.—These figures are taken from Table No. XXIV of the Revenue Report, and from page 34 of the Famine Report.

Table No. IIIB, showing RAINFALL at Tahsil Stations.

1	2	3	4	5
	AVERAGE FALL IN TENTHS OF AN INCH, FROM 1873-74 TO 1877-78.			
TAHSIL STATIONS.	1st October to 1st January.	1st January to 1st April.	1st April to 1st October.	Whole year.
Sonepat ..	14	7	154	175
Ballabgarh ..	14	5	145	164

NOTE.—These figures are taken from pages 36, 37 of the Famine Report.

Table No. IV, showing TEMPERATURE.

1	2	3	4	5	6	7	8	9	10
	TEMPERATURE IN SHADE (IN DEGREES FAHRENHEIT).								
	May.			*July.*			*December.*		
YEAR.	Maximum.	Mean.	Minimum.	Maximum.	Mean.	Minimum.	Maximum.	Mean.	Minimum.
1868-69 ..	..	..	..	..	..	..	..	..	..
1869-70 ..	..	..	..	..	..	..	..	..	..
1870-71 ..	..	..	..	..	..	..	..	..	..
1871-72 ..	..	..	..	..	..	..	..	..	..
1872-73 ..	..	..	..	..	..	..	..	..	..
1873-74 ..	..	..	..	..	..	..	..	..	..
1874-75 ..	..	..	..	..	..	..	107·0	37·8	65·39
1875-76 ..	115·9	67·3	90·96	113·5	75·0	91·07	84·2	40·0	61·38
1876-77 ..	114·0	91·6	68·0	111·0	..	..	78·3	61·6	43·4
1877-78 ..	112·4	89·2	64·7	109·6	93·2	75·2	77·9	59·9	44·0
1878-79 ..	104·9	85·2	66·2	108·6	90·7	75·0	85·2	60·2	38·3
1879-80 ..	116·4	95·2	71·2	98·6	85·6	76·2	77·7	59·4	41·3
1880-81 ..	113·3	70·2	91·8	99·6	73·7	85·9	78·1	43·0	60·0
1881-82 ..	114·1	92·4	70·2	103·0	86·8	75·0	82·7	63·0	42·6

Table No. V, showing the DISTRIBUTION of POPULATION.

1		2	3	4	5
		District.	Tahsil. Delhi.	Tahsil. Sonepat	Tahsil. Ballabgarh.
Total square miles		1,276	434	454	388
Cultivated square miles		821	Not available.		
Culturable square miles		925		Do.	
Square miles under crops (average 1877 to 1881)		844		Do.	
Total population		643,515	317,802	186,835	138,878
Urban population		203,717	177,392	13,077	13,248
Rural population		439,798	140,410	173,758	125,630
Total population per square mile		504	732	411	358
Rural population per square mile		345	323	383	324
Towns & villages.	Over 10,000 souls	2	1	1	..
	5,000 to 10,000	2	..	..	2
	3,000 to 5,000	8	1	3	4
	2,000 to 3,000	26	6	17	3
	1,000 to 2,000	91	38	35	18
	500 to 1,000	192	63	65	64
	Under 500	380	132	102	146
	Total	701	241	223	237
Occupied houses	Towns	21,926	17,982	2,097	1,847
	Villages	51,433	15,826	24,334	11,273
Unoccupied houses	Towns	16,441	13,885	1,498	1,058
	Villages	19,183	5,377	8,421	5,385
Resident families	Towns	44,574	38,110	3,204	3,260
	Villages	96,896	30,715	38,820	27,361

NOTE.—These figures are taken from Tables Nos. I and XVIII of the Census of 1881, except the cultivated, culturable and crop areas, which are taken from Tables Nos. I and XLIV of the Administration Report.

Table No. VI, showing MIGRATION.

1	2	3	4	5	6	7	8
			MALES PER 1,000 OF BOTH SEXES.		DISTRIBUTION OF IMMIGRANTS BY TAHSILS.		
DISTRICTS.	Immigrants.	Emigrants.	Immigrants.	Emigrants.	Delhi.	Sonepat.	Ballabgarh.
Gurgaon	29,416	14,394	350	344	14,121	1,329	13,966
Karnal	7,406	8,672	313	258	1,031	6,329	46
Hissar	1,692	986	526	519	1,088	599	5
Rohtak	30,038	29,510	288	259	12,867	16,796	375
Umballa	569	1,433	631	582	480	76	13
Lahore	386	2,035	565	596	342	28	16
Native States	4,223	4,336	578	540	2,755	1,375	93
N. W. P. and Oudh	52,818	42,009	424	452	29,026	9,709	14,083
Rajputana	18,016	9,500	552	347	12,753	2,668	2,595

NOTE.—These figures are taken from Table No. XI of the Census Report of 1881.

Table No. VII, showing RELIGION and SEX.

1	2	3	4	5	6	7	8
	DISTRICT.			TAHSILS.			Villages.
	Persons.	Males.	Females.	Delhi.	Sonepat.	Ballabgarh.	
Persons	643,515	..	..	317,802	186,835	138,878	439,798
Males	..	344,016	..	170,579	99,662	73,775	235,435
Females	..	..	299,499	147,223	87,173	65,103	204,363
Hindus	483,232	260,046	223,286	220,352	154,689	108,291	370,603
Sikhs	970	847	123	892	47	31	91
Jains	7,336	3,836	3,500	3,545	3,546	245	3,383
Buddhists	..	..	..	..	..	..	..
Zoroastrians	27	23	4	27	..	..	..
Musalmans	149,830	77,938	71,892	91,105	28,548	30,177	65,599
Christians	2,017	1,325	692	1,878	5	134	122
Others and unspecified	3	1	2	3	..	..	..
European & Eurasian Christians ..	1,103	794	309	1,094	4	5	..
Sunnis	144,119	74,888	69,231	88,157	26,673	29,289	62,724
Shiahs	3,134	1,510	1,624	1,767	912	455	1,003
Wahabis ..	..	..	..	..	..	..	..

NOTE.—These figures are taken from Tables Nos. III, IIIA, IIIB of the Census of 1881.

Table No. VIII, showing LANGUAGES.

1	2	3	4	5
		DISTRIBUTION BY TAHSILS.		
Language.	District.	Delhi.	Sonepat.	Ballabgarh.
Hindustani	637,783	313,752	186,614	137,417
Bagri	1,584	1,319	63	202
Panjabi	2,699	1,317	142	1,240
Pashtu	177	161	6	10
Pahari	7	6	1	..
Kashmiri	48	44	3	1
Sindhi	1	1	..	..
Persian	47	45	..	2
English	1,032	1,023	4	5

NOTE.—These figures are taken from Table No. IX of the Census Report for 1881.

Table No. IX, showing MAJOR CASTES and TRIBES.

1	2	3	4	5	6	7	8	9	10
Serial No. in Census Table No. VIIIA.	Caste or tribe.	TOTAL NUMBERS.			MALES, BY RELIGION.				Proportion per mille of population.
		Persons.	Males.	Females.	Hindu.	Sikh.	Jain.	Musalman	
	Total population ..	643,515	344,016	299,499	260,016	847	3,836	77,938	1,000
6	Pathan ..	15,969	8,281	7,688	..	..	..	8,268	25
1	Jat ..	107,075	57,859	49,216	55,896	690	..	1,269	166
2	Rajput ..	33,823	18,350	15,473	12,827	10	..	5,504	53
86	Taga ..	9,954	5,412	4,542	3,197	..	..	2,214	15
34	Meo ..	9,567	5,277	4,290	..	..	..	5,277	15
8	Gujar ..	25,836	14,663	11,173	13,511	8	..	1,144	40
45	Mali ..	12,714	6,774	5,940	6,772	..	..	1	20
105	Lodha ..	3,825	2,025	1,800	2,017	1	2	5	6
27	Ahir ..	14,544	8,145	6,399	8,120	..	..	25	23
17	Shekh ..	50,195	25,955	24,240	..	..	..	25,949	78
37	Mughal ..	5,803	2,886	2,920	..	..	..	2,882	9
3	Brahman ..	61,007	32,805	28,202	31,563	6	..	1,229	95
24	Saiyad ..	8,800	4,403	4,397	..	..	..	4,402	14
53	Bairagi ..	4,610	2,597	2,013	..	..	..	2,597	7
63	Madari ..	3,144	1,618	1,526	..	..	..	1,618	5
21	Nai ..	11,080	5,799	5,281	5,103	..	..	696	17
40	Jogi ..	5,006	2,698	2,308	2,650	..	..	47	8
14	Banya ..	42,414	22,933	19,481	19,110	..	3,822	1	66
16	Khatri ..	4,657	2,414	2,243	2,328	31	..	55	7
90	Kayath ..	3,887	2,080	1,807	2,037	..	..	39	6
4	Chuhra ..	26,067	13,711	12,356	13,352	2	..	353	40
43	Dhanak ..	6,700	3,521	3,179	3,516	..	..	3	11
5	Chamar ..	63,407	32,767	30,640	32,451	..	..	1	98
9	Julaha ..	6,673	3,608	3,065	2,895	..	..	710	10
15	Jhinwar ..	14,487	7,976	6,511	6,139	..	..	1,835	22
22	Lohar ..	5,934	3,140	2,794	2,287	..	12	841	10
11	Tarkhan ..	9,622	5,418	4,204	4,832	20	..	566	15
13	Kumhar ..	13,724	7,333	6,391	7,171	5	..	157	21
32	Dhobi ..	4,157	2,205	1,952	1,230	7	..	968	6
23	Teli ..	5,593	3,006	2,587	686	..	..	2,320	9
38	Qassab ..	4,320	2,103	2,217	..	..	..	2,103	7
30	Sunar ..	4,085	2,207	1,878	2,173	21	..	12	6
66	Koli ..	4,409	2,357	2,052	2,332	..	..	21	7

NOTE.—These figures are taken from Table No. VIIIA of the Census of 1881.

Table No. IXA, showing MINOR CASTES and TRIBES.

1	2	3	4	5
Serial No. in Census Table No. VIIIA.	Caste or tribe.	Persons.	Males.	Females
7	Arain	1,585	825	760
18	Biloch	1,318	648	670
25	Mirasi	1,756	866	890
31	Saini	1,672	842	830
35	Faqir, miscellaneous & unspecified	1,428	801	627
36	Chhimba	2,626	1,431	1,195
42	Mallah	740	396	344
47	Maniar	742	388	354
55	Ror	666	347	319
56	Kalal	758	416	342
61	Darzi	583	313	270
62	Bhat	1,019	542	477
73	Gadaria	2,457	1,289	1,168
87	Khatik	1,867	1,027	840
92	Bhatyara	519	275	244
94	Banjara	1,854	989	915
102	Gusain	690	397	293
108	Bharbhunja	1,223	667	556
109	Agari	1,300	696	604
110	Rangrez	681	376	305
111	Benawa	1,281	695	586
125	Ghosi	876	471	405
135	Kanjar	591	283	308
142	Kachhi	1,323	693	630
143	Jalali	973	530	443
147	Reya	1,993	1,067	926

NOTE.—These figures are taken from Table No. VIIIA of the Census of 1881.

Table No. X, showing CIVIL CONDITION.

1	2	3	4	5	6	7	8
	DETAILS.	SINGLE.		MARRIED.		WIDOWED.	
		Males.	Females.	Males.	Females.	Males.	Females.
Actual figures for religions.	All religions	144,007	82,737	160,472	166,830	30,537	49,932
	Hindus	104,525	58,494	130,867	128,116	24,654	36,676
	Sikhs	416	21	379	92	52	10
	Jains	1,435	823	1,898	1,921	503	756
	Buddhists	..	..	..	..	..	..
	Musalmans	36,796	23,093	35,869	36,869	5,273	12,430
	Christians	825	302	445	330	55	60
Distribution of every 10,000 souls of each age.	All ages	4,186	2,763	4,926	5,570	888	1,667
	0—10	9,803	9,590	193	404	4	6
	10—15	7,317	4,419	2,599	5,495	84	86
	15—20	4,315	530	5,423	9,211	262	259
	20—25	2,548	95	6,905	9,391	547	514
	25—30	1,571	53	7,702	9,110	727	836
	30—40	987	42	7,937	8,206	1,076	1,752
	40—50	647	31	7,547	6,231	1,806	3,737
	50—60	493	34	6,752	3,956	2,755	6,010
	Over 60	418	34	5,333	1,736	4,249	8,230

NOTE.—These figures are taken from Table No. VI of the Census Report.

Table No. XI, showing BIRTHS and DEATHS.

1	2	3	4	5	6	7	8	9	10
YEARS.	TOTAL BIRTHS REGISTERED.			TOTAL DEATHS REGISTERED.			TOTAL DEATHS FROM		
	Males.	Females.	Persons.	Males.	Females.	Persons.	Cholera.	Small-pox.	Fever.
1877 ..	..	..	..	8,717	7,345	16,062	..	768	8,365
1878 ..	..	..	..	17,866	15,874	33,740	44	845	22,729
1879 ..	..	..	..	23,121	20,363	43,484	416	12	35,335
1880 ..	10,341	8,793	19,134	11,445	9,103	20,548	2	1	15,577
1881 ..	15,842	13,704	29,546	12,452	10,570	23,022	167	72	15,734

NOTE.—These figures are taken from Tables Nos. I, II, VII, VIII, and IX of the Sanitary Report.

Table No. XI A, showing MONTHLY DEATHS from ALL CAUSES.

1	2	3	4	5	6	7
MONTH.	1877.	1878.	1879.	1880.	1881.	Total.
January ..	1,135	1,743	2,159	2,767	1,718	9,522
February ..	842	1,405	1,699	1,746	1,694	7,386
March ..	1,009	1,648	1,442	1,541	1,639	7,369
April ..	1,108	1,933	1,499	1,351	1,934	7,825
May ..	1,258	2,156	2,600	1,729	1,733	9,476
June ..	1,485	2,534	1,930	1,800	1,815	9,564
July ..	1,265	1,530	1,139	1,184	1,459	6,577
August ..	1,193	1,769	3,416	1,289	1,184	8,851
September ..	999	2,818	6,481	1,432	1,794	13,524
October ..	1,084	5,875	8,935	1,708	2,619	20,221
November ..	1,853	6,825	7,593	1,951	2,594	20,816
December ..	2,741	3,504	4,591	2,050	2,839	15,725
Total ..	16,062	33,740	43,484	20,548	23,022	136,856

NOTE.—These figures are taken from Table No. III of the Sanitary Report.

Table No. XI B, showing MONTHLY DEATHS from FEVER.

1	2	3	4	5	6	7
MONTH.	1877.	1878.	1879.	1880.	1881.	Total.
January ..	640	772	1,638	2,308	1,214	6,572
February ..	442	620	1,308	1,408	1,249	5,027
March ..	635	777	1,057	1,238	1,183	4,890
April ..	639	905	1,093	1,125	1,408	5,170
May ..	682	1,019	1,905	1,441	1,201	6,248
June ..	809	1,557	1,352	1,485	1,217	6,420
July ..	697	868	788	879	908	4,140
August ..	590	1,030	2,608	865	661	5,763
September ..	520	1,903	5,381	947	1,081	9,832
October ..	522	4,749	7,769	1,074	1,096	15,810
November ..	915	5,745	6,491	1,378	1,852	16,381
December ..	1,265	2,784	3,945	1,429	2,064	11,487
TOTAL ..	8,365	22,729	35,335	15,577	15,734	97,740

NOTE.—These figures are taken from Table No. IX of the Sanitary Report.

Table No. XII, showing INFIRMITIES.

1		2	3	4	5	6	7	8	9
		INSANE.		BLIND.		DEAF AND DUMB.		LEPERS.	
		Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.
All religions	Total ..	150	70	1,516	1,710	158	101	180	63
	Villages ..	67	45	1,010	1,114	105	67	136	53
Hindus ..		104	52	1,163	1,283	119	79	138	50
Sikhs ..		..	..	..	1	..	..	..	..
Musalmans ..		43	18	341	419	37	22	39	12

NOTE.—These figures are taken from Tables Nos. XIV to XVII of the Census of 1881.

Table No. XIII, showing EDUCATION.

1		2	3	4	5	1	2	3	4	5
		MALES.		FEMALES.			MALES.		FEMALES.	
		Under instruction.	Can read and write.	Under instruction.	Can read and write.		Under instruction.	Can read and write.	Under instruction.	Can read and write.
All religions	Total ..	6,443	14,678	293	530	Musalmans ..	1,809	3,122	153	172
	Villages ..	1,685	8,398	53	34	Christians ..	101	753	94	233
Hindus ..		4,078	8,853	41	120	Tahsil Delhi ..	4,891	7,459	257	500
Sikhs ..		164	343	1	..	" Sonepat ..	718	4,553	..	14
Jains ..		291	1,585	8	2	" Ballabgarh ..	834	2,666	36	16
Buddhists ..		..	..	..	..					

NOTE.—These figures are taken from Table No. XIII of the Census of 1881.

Table No. XIV, showing detail of SURVEYED and ASSESSED AREA

1	2	3	4	5	6	7	8	9	10	11	12
	CULTIVATED.				UNCULTIVATED.						
	Irrigated.										
	By Government works.	By private individuals.	Unirrigated.	Total cultivated.	Grazing lands.	Culturable.	Unculturable.	Total uncultivated.	Total area assessed.	Gross assessment.	Unappropriated culturable waste, the pro- [illegible]
1868-69 ..	122,173	84,680	318,402	525,255	168,197	12,044	109,176	289,417	814,672	939,669	1,28[illegible]
1873-74 ..	118,615	94,577	319,682	532,874	14,450	114,404	156,091	284,945	817,819	940,234	1,35[illegible]
1878-79 ..	95,346	80,276	349,954	525,676	10,115	133,642	135,500	279,257	804,933	969,900	..

NOTE.—These figures are taken from Table No. VIII of the Administration Report, except the last column, which taken from Table No. I of the same Report.

Table No. XV, showing TENURES held direct from Government as they stood in 1878-79.

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
	Whole District.				Tahsil Delhi.				Tahsil Sonepat.				Tahsil Ballabgarh.			
NATURE OF TENURE.	No. of estates.	No. of villages.	No. of holders or shareholders.	Gross area in acres.	No. of estates.	No. of villages.	No. of holders or shareholders.	Gross area in acres.	No. of estates.	No. of villages.	No. of holders or shareholders.	Gross area in acres.	No. of estates.	No. of villages.	No. of holders or shareholders.	Gross area in acres.
A.—Estates not being village communities, and paying in common (Zamindari).																
III.—Paying 1,000 to 5,000 revenue. Held by individuals or families under the ordinary law.	10	10	329	14,286												
IV.—Paying 1,000 rupees revenue and under. As above.	8	8	10	6,118												
Proprietary cultivating village communities.																
B.—*Zamindari* .. Paying the revenue and holding the land in common	94	94	2,339	43,682												
C.—*Pattidari* .. The land and revenue being divided upon ancestral of customary shares, subject to succession by the law of inheritance.	93	93	5,632	80,652												
D.—*Bhayachara* .. In which possession is the measure of right in all lands	169	169	11,841	155,310												
E.—*Mixed or imperfect pattidari or bhayachara.* In which the lands are held partly in severalty and partly in common, the measure of right in common land being the amount of the share or the extent of land held in severalty.	428	428	53,402	392,598					*Figures not available.*							
F.—*Grantees of Government not falling under any previous class, and paying revenue direct to Government in the position of :—*																
I.—*Proprietors*, including individuals rewarded for service or otherwise, but not purchasers of Government waste.	3	3	11	3,235												
II.—*Lessees*	5	5	1	4,196												
G.—*Landholders who have redeemed the revenue and are not members of any village community nor included in any previous class.*	..	..	13	49												
Total ..	810	810	73,638	700,635												

Note.—These figures are taken from Table No. XXXIII of the Revenue Report for 1878-79.

Table No. XVI, showing TENURES not held direct from Government as they stood in 1878-79.

1	2	3	4	5	6	7	8	9
	District Delhi.		Tahsil Delhi.		Tahsil Sonepat.		Tahsil Ballabgarh.	
NATURE OF TENURE.	No. of holdings.	Acres of land held.	No. of holdings.	Acres of land held.	No. of holdings.	Acres of land held.	No. of holdings.	Acres of land held.
A.—TENANTS WITH RIGHT OF OCCUPANCY.								
I. Paying rent in cash. (a) Paying the amount of Government revenue only to the proprietors.	26,282	71,158	*Figures not available.*					
(b) Paying such amount, plus a cash Malikanah ..	2,582	12,089						
(c) Paying at stated cash rates per acre ..	2,634	9,805						
(d) Paying lump sums (cash) for their holdings ..	2,126	9,342						
Total paying rent in cash ..	33,624	102,454						
II. Paying rent in kind. (a) Paying a stated share of the produce in kind. (1) Paying ½ produce and more ..	6	15						
(2) ⅓ produce and less than ½ produce ..	1,170	4,516						
(3) ¼ " ⅓ " ..	6	41						
(4) ⅕ " ¼ " ..	382	1,214						
Total paying rent in kind ..	1,564	5,786						
GRAND TOTAL of Tenants with rights of occupancy ..	35,188	1,08,240						
B.—TENANTS HOLDING CONDITIONALLY.								
I. For life ..	11	*7						
II. Subject to village service and payment of rent ..	8	7						
C.—TENANTS-AT-WILL.								
I. Paying in cash ..	9,791	23,541						
II. Paying in kind. (a) ½ produce and more ..	109	545						
(b) less than ½ produce ..	1,163	3,869						
D.—PARTIES HOLDING AND CULTIVATING SERVICE-GRANTS FROM PROPRIETORS FREE OF ALL REVENUE.								
I. Sankalap or Dharmarth ..	961	1,535						
II. Conditional on service ..	314	588						
GRAND TOTAL OF TENURES ..	47,545	138,332						

Note.—These figures are taken from Table No. XXXIV of the Revenue Report.

Table No. XVII, showing GOVERNMENT LANDS.

1	2	3	4	5	6	7	8	9
			Acres held under cultivating leases.		*Remaining acres.*			
	No. of estates.	Total acres.	Cultivated.	Uncultivated.	Under Forest Department.	Under other Departments.	Under Deputy Commissioner.	Average yearly income, 1877-78 to 1881-82.
Whole District ..	24	4,165	..	..	..	3,519	646	5,446
Tahsil Delhi ..	22	4,127	..	..	..	3,481	646	..
" Sonepat ..	..	..	..	..	..	..	..	..
" Ballabgarh ..	2	38	..	..	..	38	..	..

NOTE.—These figures are taken from Table No. IX of the Revenue Report of 1881-82.

Table No. XIX, showing LAND ACQUIRED by GOVERNMENT.

Purpose for which acquired.	Acres acquired.	Compensation paid, in rupees.	Reduction of revenue, in rupees.
Roads ..	690	15,767	723
Canals ..	4,208	1,73,143	5,696
State Railways ..	357	1,03,098	354
Guaranteed Railways ..	313	6,01,504	365
Miscellaneous ..	545	40,264	457
Total ..	6,113	9,33,776	7,595

NOTE.—These figures are taken from Table No. XI of the Revenue Report.

Table No. XX, showing ACRES UNDER CROPS.

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
YEARS.	Total.	Rice.	Wheat.	Jawar.	Bajra.	Makai.	Jau.	Gram.	Moth.	Poppy.	Tobacco.	Cotton.	Indigo.	Sugarcane.	Vegetables.
1873-74 ..	528,260	32,261	108,332	47,900	48,015	14,500	70,046	37,615	15,000	1	5,150	30,010	170	60,622	11,800
1874-75 ..	532,785	35,200	105,956	52,920	43,195	17,000	71,127	36,540	13,000	..	5,827	30,005	163	37,675	11,702
1875-76 ..	629,451	26,000	157,000	40,100	31,050	15,000	60,700	50,700	14,000	..	7,100	21,619	156	38,036	13,180
1876-77 ..	583,431	27,900	159,900	34,560	82,830	13,900	61,290	57,500	11,985	..	7,472	24,565	100	34,881	11,700
1877-78 ..	512,578	16,400	127,355	26,753	14,419	13,600	91,665	84,999	2,350	..	7,799	22,310	100	43,253	19,855
1878-79 ..	523,709	11,948	115,782	117,032	64,621	6,225	6,7535	58,391	4,072	15	4,971	17,152	100	32,000	2,850
1879-80 ..	582,755	12,406	125,519	127,834	75,621	7,497	79,147	63,000	5,913	..	5,032	19,875	110	33,900	3,500
1880-81 ..	542,275	14,898	134,998	52,099	88,359	11,811	82,154	50,191	8,272	.	6,694	22,901	269	21,199	3,211
1881-82 ..	540,060	13,503	136,815	57,611	90,372	11,573	74,808	48,312	7,413	..	7,402	26,819	369	20,367	3,028
NAME OF TAHSIL.	TAHSIL AVERAGES FOR THE TWO YEARS, FROM 1880-81 TO 1881-82.														
Delhi ..	179,432	2,713	39,043	30,285	35,834	2,410	23,963	19,805	2,116	..	491	4,911	4	7,910	929
Sonepat ..	197,178	11,487	67,019	6,610	33,212	7,486	3,886	16,116	4,146	..	624	12,151	..	12,558	596
Ballabgarh	164,657	..	29,842	17,960	20,319	1,796	0,632	13,330	1,580	..	5,933	7,798	315	315	1,600
TOTAL ..	541,267	14,200	135,904	54,855	89,365	11,692	78,481	49,251	7,842	..	7,048	24,860	319	20,783	3,119

NOTE.—These figures are taken from Table No. XLIV of the Administration Report.

Table No. XXI, showing RENT RATES and AVERAGE YEILD.

1			2			3
Nature of crop.			Rent per acre of land suited for the various crops, as it stood in 1881-82.			Average produce per acre as estimated in 1881-82.
			Rs.	A.	P.	lbs.
Rice		Maximum	10	0	0	968
		Minimum	4	0	0	
Indigo		Maximum	7	0	0	130
		Minimum	3	..	..	
Cotton		Maximum	8	0	0	153
		Minimum	3	0	0	
Sugar		Maximum	15	0	0	..
		Minimum	5	0	0	
Opium		Maximum	..	..	..	..
		Minimum	..	..	..	
Tobacco		Maximum	12	0	0	833
		Minimum	5	0	0	
Wheat	Irrigated	Maximum	7	0	0	790
		Minimum	3	0	0	
	Unirrigated	Maximum	5	0	0	
		Minimum	2	0	0	
Inferior grains	Irrigated	Maximum	4	0	0	347
		Minimum	2	0	0	
	Unirrigated	Maximum	3	0	0	
		Minimum	1	0	0	
Oil seeds	Irrigated	Maximum	4	0	0	180
		Minimum	2	0	0	
	Unirrigated	Maximum	2	0	0	
		Minimum	1	0	0	
Fibres	Irrigated	Maximum	6	0	0	183
		Minimum	3	0	0	
	Unirrigated	Maximum	4	0	0	
		Minimum	2	0	0	
Gram		..	..	..	..	700
Barley		..	..	..	..	1,040
Bajra		..	..	..	..	200
Jawar		..	..	..	..	240
Vegetables		..	..	..	..	..
Tea		..	..	..	..	..

NOTE.—These figures are taken from Table No. XLVI of the Administration Report.

Table No. XXII, showing NUMBER of STOCK.

1	2	3	4	5	6	7
KIND OF STOCK.	WHOLE DISTRICT FOR THE YEARS			TAHSILS FOR THE YEAR 1878-79.		
	1868-69.	1873-74.	1878-79.	Delhi.	Sonepat.	Ballabgarh.
Cows and bullocks	151,494	159,500	165,627	*Not available.*		
Horses	1,511	1,920	969			
Ponies	1,283	950	425			
Donkeys	5,455	4,850	3,025			
Sheep and goats	50,982	53,088	36,000			
Pigs	32,741	..	4,500			
Camels	718	600	295			
Carts	6,538	5,350	4,946			
Ploughs	26,290	24,850	26,424			
Boats	36	37	39			

NOTE.—These figures are taken from Table No. XLV of the Administration Report.

Table No. XXIII, showing OCCUPATIONS of MALES.

1	2	3	4	5	1	2	3	4	5
Number.	Nature of occupations.	Males above 15 years of age. Towns.	Villages.	Total.	Number.	Nature of occupations.	Males above 15 years of age. Towns.	Villages.	Total.
1	Total population ..	74,441	149,806	224,247	17	Agricultural labourers ..	521	4,569	5,090
2	Occupation specified ..	71,506	146,474	217,980	18	Pastoral ..	253	867	1,120
3	Agricultural, whether simple or combined.	4,264	88,346	92,610	19	Cooks and other servants ..	6,963	994	7,957
					20	Water-carriers ..	2,014	995	3,009
4	Civil Administration ..	3,130	1,643	4,773	21	Sweepers and scavengers ..	1,528	5,601	7,129
5	Army ..	1,255	72	1,327	22	Workers in reed, cane, leaves, straw, &c.	1,307	1,217	2,524
6	Religion ..	1,294	3,452	4,746					
7	Barbers ..	1,178	2,336	3,514	23	Workers in leather ..	788	3,187	3,975
8	Other professions ..	1,894	788	2,682	24	Boot-makers ..	2,890	3,311	6,201
9	Money-lenders, general traders, pedlars, &c.	2,821	2,096	4,917	25	Workers in wool and pashm	265	140	405
					26	" " silk ..	573	8	581
10	Dealers in grain and flour ..	2,057	4,096	6,153	27	" " cotton ..	2,417	6,074	8,491
11	Corn-grinders, parchers, &c.	436	721	1,157	28	" " wood ..	1,480	2,843	4,323
12	Confectioners, green-grocers, &c.	2,085	453	2,538	29	Potters ..	541	2,481	3,022
					30	Workers and dealers in gold and silver.	3,832	615	4,447
13	Carriers and boatmen ..	3,187	2,106	5,293					
14	Landowners ..	847	54,043	54,890	31	Workers in iron ..	605	1,295	1,900
15	Tenants ..	2,145	22,057	24,202	32	General labourers ..	4,899	7,303	12,202
16	Joint-cultivators ..	29	1,715	1,744	33	Beggars, faqirs, and the like	2,189	4,888	7,077

NOTE.—These figures are taken from Table No. XII A of the Census Report of 1881.

Table No. XXIV, showing MANUFACTURES.

1	2 Silk.	3 Cotton.	4 Wool.	5 Other fabrics.	6 Paper	7 Wood.	8 Iron.	9 Brass and copper.	10 Buildings.	11 Dyeing and manufacturing of dyes.
Number of mills and large factories	..	..	..	..	1	..	..	..	..	..
Number of private looms or small works.	110	3,016	72	121	7	1,227	919	122	227	567
Number of workmen in large works. Male ..	..	..	..	..	116	..	..	..	..	..
Number of workmen in large works. Female ..	..	..	..	..	..	..	..	..	..	..
Number of workmen in small works or independent artisans.	324	4,784	168	226	39	2,106	1,820	438	466	1,204
Value of plant in large works ..	..	..	..	..	..	..	..	..	..	..
Estimated annual out-turn of all works in rupees.	1,33,823	3,74,385	9,178	16,815	12,948	2,41,543	1,53,443	2,12,770	91,690	1,02,462

	12 Leather.	13 Pottery, common and glazed.	14 Oil-pressing and refining.	15 Pashmina and Shawls.	16 Carpets.	17 Gold, silver, and jewellery.	18 Other manufactures.	19 Total.
Number of mills and large factories	..	..	..	..	..	..	..	1
Number of private looms or small works.	1,861	791	481	..	35	1,241	1,625	12,422
Number of workmen in large works. Male ..	..	..	..	..	..	..	..	116
Number of workmen in large works. Female ..	..	..	..	..	..	..	..	..
Number of workmen in small works or independent artisans.	4,210	1,987	857	..	105	4,024	31,451	54,308
Value of plant in large works ..	..	..	..	..	..	..	..	..
Estimated annual out-turn of all works in rupees.	10,07,749	94,332	2,06,695	..	14,173	55,00,702	4,03,237	85,75,945

NOTE.—These figures are taken from the Report on Internal Trade and Manufactures for 1881-82.

Table No. XXV, showing RIVER TRAFFIC.

1 Trade. From	2 To	3 Principal Merchandise carried.	4 Average duration of Voyage in days. Summer, or floods.	5 Winter or low water.	6 Distance in miles.
Bagpat, Zillah Meerut opposite Jhundpur, tahsil Sonepat ..	Delhi ..	Wheat ..	2	5	20
Delhi ..	Agra ..	Wheat, grain, barley and mung ..	4 or 5 days, through the Agra Canal.		150
Agra ..	Delhi ..	Slabs and grinding stones ..	10 or 11 days, through the Agra Canal.		150

NOTE.—These figures are taken from pages 759, 760 of the Famine Report.

Table No. XXVI, showing RETAIL PRICES.

1	2		3		4		5		6		7		8		9		10		11		12		13		14		15		16	
	Number of seers and chitanks per rupee.																													
Year.	Wheat.		Barley.		Gram.		Indian corn.		Jawar.		Bajra.		Rice (fine).		Urd dal.		Potatoes.		Cotton (cleaned).		Sugar (refined).		Ghi (cow's).		Firewood.		Tobacco.		Salt (Lahori).	
	S.	Ch.	S.	Ch.	S.	Ch.	S.	Ch.	S.	Ch.	S.	Ch.	S.	Ch.	S.	Ch.	S.	Ch.	S.	Ch.	S.	Ch.	S.	Ch.	S.	Ch.	S.	Ch.	S.	Ch.
1861-62 ..	15	14	24	2	15	7	..	..	20	9	22	3	6	5	17	15	..	..	4	5	2	10	2	..	115	11	2	3	6	12
1862-63 ..	29	1	44	7	31	9	..	..	33	7	30	14	5	9	27	7	..	..	2	15	2	12	1	13	105	12	2	11	6	13
1863-64 ..	25	9	34	9	31	4	..	..	29	2	25	9	6	8	23	1	..	..	1	6	2	9	2	..	104	4	2	13	..	1
1864-65 ..	20	7	28	6	25	13	..	..	24	10	22	7	6	1	13	7	..	..	2	..	2	13	1	13	106	4	2	13	6	1
1865-66 ..	17	1	25	7	23	10	..	..	25	9	22	2	5	9	13	4	..	..	2	15	2	13	1	8	93	5	2	13	6	8
1866-67 ..	18	8	27	10	23	10	..	..	25	7	23	3	5	13	15	8	..	..	2	13	2	11	1	7	82	11	2	3	6	12
1867-68 ..	24	9	29	4	13	8	..	..	27	6	25	3	5	12	18	12	..	..	3	2	2	5	1	6	75	5	2	2	7	..
1868-69 ..	25	13	22	14	18	2	..	..	18	4	16	11	5	9	15	5	..	..	2	2	2	6	1	4	79	8	1	12	6	13
1869-70 ..	10	9	15	1	9	15	..	..	14	15	12	11	4	13	17	14	..	..	1	13	2	5	1	4	83	15	2	13	5	15
1870-71 ..	15	15	24	5	15	12	..	..	14	2	21	4	5	1	14	2	..	..	2	3	2	5	1	5	90	1	2	9	6	9
1871-72 ..	21	..	26	8	20	8	21	..	20	..	21	..	6	..	18	..	16	..	2	12	2	8	1	11	60	..	2	8	8	..
1872-73 ..	21	..	32	..	22	..	24	..	28	..	24	..	6	..	21	..	20	..	3	..	2	..	1	..	80	..	2	..	8	..
1873-74 ..	19	..	25	8	26	..	24	..	27	..	22	..	6	..	20	..	20	..	3	4	2	6	1	10	80	..	2	..	8	..
1874-75 ..	21	8	30	..	29	..	29	..	26	..	26	..	7	..	21	..	10	..	2	10	2	10	1	12	80	..	2	8	8	..
1875-76 ..	23	8	32	8	30	..	20	..	30	..	28	..	6	..	23	..	16	..	3	..	2	8	1	12	70	..	2	8	8	8
1876-77 ..	27	..	37	..	34	..	36	..	42	..	33	..	7	..	23	..	28	..	3	4	2	12	1	12	94	..	2	8	8	8
1877-78 ..	13	4	16	8	15	8	15	..	14	8	13	..	5	8	9	..	14	8	2	4	2	12	1	9	100	..	2	8	6	8
1878-79 ..	13	..	10	..	14	12	16	8	17	..	16	..	5	..	10	..	16	..	3	8	2	12	1	3	80	..	2	8	10	..
1879-80 ..	15	..	23	..	17	8	23	..	23	..	21	..	5	..	16	8	10	..	2	12	2	..	1	5	60	..	2	8	9	..
1880-81 ..	17	12	22	..	21	..	28	8	23	8	20	..	5	4	16	..	27	..	2	12	2	..	1	8	90	..	2	8	8	..
1881-82 ..	19	4	27	8	22	8	24	8	24	8	21	8	5	8	14	..	20	..	3	..	2	4	1	8	80	..	2	4	8	..

NOTE.—The figures for the first ten years are taken from a statement published by Government (Punjab Government No. 209 S. of 19th August 1872), and represent the average prices for the 12 months of each year. The figures for the last ten years are taken from Table No. XLVII of the Administration Report, and represent prices as they stood on the 1st January of each year.

Table No. XXVII, showing PRICE of LABOUR.

1	2	3	4	5	6	7	8	9	10	11	12	13
YEAR.	WAGES OF LABOUR PER DAY.				CARTS PER DAY.		CAMELS PER DAY		DONKEYS PER SCORE PER DAY.		BOATS PER DAY.	
	Skilled.		Unskilled.									
	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest
	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.		Rs. A. P.		Rs. A. P.		Rs. A. P.	
1868-69 ..	0 8 0	0 2 0	0 4 0	0 2 0	1 12 0		0 8 0	0 6 0	3 12 0		0 8 0	
1873-74 ..	0 6 0	0 5 0	0 3 0	0 2 0	1 12 0		0 8 0		3 12 0		0 8 0	
1878-79 ..	0 6 0	0 5 0	0 3 0	0 2 0	0 14 0		6 8 0		3 12 0		0 8 0	
1879-80 ..	0 6 0	0 5 0	0 3 0	0 2 0	0 14 0		0 8 0		3 12 0		0 8 0	
1880-81 ..	0 6 0	0 5 0	0 3 0	0 2 0	0 14 0		0 8 0		3 12 0		0 8 0	
1881-82 ..	0 6 0	0 5 0	0 3 0	0 2 0	0 14 0		0 8 0		3 12 0		0 8 0	

NOTE.—These figures are taken from Table No. XLVIII of the Administration Report.

Table No. XXVIII, showing REVENUE COLLECTED.

1	2	3	4	5	6	7	8	9
YEAR.	Fixed Land Revenue.	Fluctuating and Miscellaneous Land Revenue.	Tribute.	Local rates.	EXCISE.		Stamps.	Total Collections.
					Spirits.	Drugs.		
1868-69	8,70,681	13,514	..	..	28,193	27,041	1,38,434	10,77,863
1869-70	8,78,595	10,136	..	..	27,046	25,219	1,42,238	10,83,234
1870-71	8,81,478	9,718	..	..	28,422	26,692	1,49,243	10,95,553
1871-72	8,81,874	7,261	..	53,543	45,016	26,810	1,39,813	11,54,317
1872-73	8,81,632	8,677	..	59,561	33,412	26,848	1,40,863	11,50,993
1873-74	8,75,943	10,261	..	59,660	30,548	31,733	1,47,246	11,55,391
1874-75	8,74,936	8,074	..	58,990	37,962	30,048	1,46,071	11,56,081
1875-76	8,49,829	6,626	..	57,559	42,208	30,012	1,62,312	11,48,546
1876-77	8,85,779	10,030	..	58,912	43,667	33,619	1,76,955	12,08,962
1877-78	8,80,170	12,940	..	59,308	34,595	33,549	2,03,553	12,24,115
1878-79	8,76,934	26,008	..	80,523	26,915	30,450	1,89,445	12,30,275
1879-80	8,66,100	7,292	..	73,521	23,781	26,594	1,71,352	11,68,940
1880-81	7,95,145	64,475	..	67,219	29,673	31,005	1,69,346	11,56,863
1881-82	7,94,175	21,979	..	70,406	30,186	27,096	1,78,038	11,21,880

NOTE.—These figures are taken from Table No. XLIV of the Revenue Report. The following revenue is excluded:— "Canal, Forests, Customs and Salt, Assessed Taxes, Fees, Cesses."

Table No. XXIX, showing REVENUE DERIVED from LAND.

1	2	3	4	5	6	7	8	9	10	11	12	13
YEAR.	Fixed land revenue (demand).	Fluctuating and miscellaneous land revenue (collections).	FLUCTUATING REVENUE.					MISCELLANEOUS REVENUE.				
			Revenue of alluvial lands.	Revenue of waste lands brought under assessment.	Water advantage revenue.	Fluctuating assessment of river lands.	Total fluctuating land revenue.	Grazing dues. By enumeration of cattle.	Grazing dues. By grazing leases.	Sale of wood from rakhs and forests.	Sajji.	Total miscellaneous land revenue.
District Figures.												
Total of 5 years— 1868-69 to 1872-73 ..	44,03,667	49,306	1,993	..	..	..	21,459	..	8,666	..	..	27,847
Total of 5 years— 1873-74 to 1877-78 ..	44,22,884	46,675	2,009	..	..	..	22,767	..	6,479	..	..	23,908
1878-79 ..	8,82,508	25,802	576	..	..	..	19,467	..	2,610	..	..	6,335
1879-80 ..	9,07,860	7,074	632	..	..	..	3,986	..	..	..	..	3,088
1880-81 ..	7,93,956	63,376	1,524	..	..	1,036	6,523	..	..	..	..	56,853
1881-82 ..	7,95,881	9,691	859	..	..	875	6,311	..	..	..	..	3,380
Tahsil Totals for 5 years— 1877-78 to 1881-82.												
Tahsil Delhi ..	14,28,098	49,579	2,301	..	..	1,911	21,566	..	5,244	..	..	28,013
,, Sonepat ..	18,56,902	28,950	279	..	..	..	378	..	..	..	..	28,572
,, Ballabgarh ..	9,79,842	39,350	1,653	..	..	..	19,167	..	..	..	..	20,183

NOTE.—These figures are taken from Tables Nos. I and III of the Revenue Report.

Table No. XXX, showing ASSIGNED LAND REVENUE.

1	2	3	4	5	6	7	8	9	10	11
TAHSIL.	TOTAL AREA AND REVENUE ASSIGNED.								PERIOD OF ASSIGNMENT.	
	Whole Villages.		*Fractional parts of Villages.*		*Plots.*		*Total.*		*In perpetuity.*	
	Area.	Revenue.	Area.	Revenue.	Area.	Revenue.	Area.	Revenue.	Area.	Revenue.
Delhi (*a*) ..	..	..	..	..	..	..	..	..	..	..
Sonepat (*a*) ..	..	..	..	..	..	..	..	..	..	..
Ballabgarh (*a*) ..	..	..	..	..	..	..	..	..	..	..
Total District (*a*) ..	19,418	24,257	8,048	6,231	9,098	22,605	36,564	53,093	27,391	40,502

	12	13	14	15	16	17	18	19	20	21	22	23	24	25
TAHSIL.	PERIOD OF ASSIGNMENT.—*Concluded.*								NUMBER OF ASSIGNEES.					
	For one life.		*For more lives than one.*		*During maintenance of Establishment.*		*Pending orders of Government.*							
	Area.	Revenue.	Area.	Revenue.	Area.	Revenue.	Area.	Revenue.	In perpetuity.	For one life.	For more lives than one.	During maintenance.	Pending orders.	TOTAL.
Delhi (*a*) ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Sonepat (*a*) ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Ballabgarh (*a*) ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total District (*a*) ..	3,242	6,346	126	246	5,421	5,123	384	876	27,173	6,734	84	5,163	42	39,146

NOTE.—These figures are taken from Table No. XII of the Revenue Report of 1881-82.

(*a*).—Tahsil details not available.

Table No. XXXI, showing BALANCES, REMISSIONS and TAKAVI.

YEAR.	Balances of land revenue in rupees.		Reductions of fixed demand on account of bad seasons, deterioration, &c., in rupees.	Takavi advances in rupees.
	Fixed revenue.	Fluctuating and miscellaneous revenue.		
1868-69	2,596	..	..	8,448
1869-70	4,532	..	13	25,234
1870-71	1,451	..	..	5,570
1871-72	199	..	..	2,750
1872-73	629	..	..	830
1873-74	6,801	..	..	800
1874-75	9,686	..		..
1875-76	36,337	25	..	1,060
1876-77	13,155	322	..	525
1877-78	4,467	164	..	3,562
1878-79	6,689	478	..	208
1879-80	42,040	167	..	910
1880-81	3,311	13,363	..	424
1881-82	1,841	455	..	450

NOTE.—These figures are taken from Tables Nos. I, II, III, and XVI of the Revenue Report.

Table No. XXXII, showing SALES and MORTGAGES of LAND.

1	2	3	4	5	6	7	8	9	10
	SALES OF LAND.						MORTGAGES OF LAND.		
	Agriculturists.			*Non-Agriculturists.*			*Agriculturists.*		
YEAR.	No. of cases.	Area of land in acres.	Purchase money.	No. of cases.	Area of land in acres.	Purchase money.	No. of cases.	Area of land in acres.	Mortgage money.
DISTRICT FIGURES.									
Total of 6 years—1868-69 to 1873-74 ..	272	8,278	1,80,215	..	..	..	708	11,363	2,82,525
Total of 4 years—1874-75 to 1877-78 ..	97	1,824	80,882	94	1,417	75,998	200	1,646	71,068
1878-79 ..	24	399	15,543	25	293	23,379	63	318	16,143
1879-80 ..	43	625	19,042	21	328	10,596	70	684	19,229
1880-81 ..	34	619	16,120	24	1,247	75,616	64	197	16,295
1881-82 ..	69	378	32,381	59	382	47,032	202	792	54,521
TAHSIL TOTALS FOR 2 YEARS— 1880-81 TO 1881-82.									
Tahsil Delhi ..	19	506	14,724	39	286	37,482	25	137	38,207
,, Sonepat ..	55	271	26,136	29	83	15,245	214	735	27,522
,, Ballabgarh ..	29	220	7,641	15	1,260	69,971	27	117	5,087

	11	12	13	14	15	16	17	18	19
	MORTGAGES OF LAND.—*Concluded.*			REDEMPTIONS OF MORTGAGED LAND.					
	Non-Agriculturists.			*Agriculturists.*			*Non-Agriculturists.*		
YEAR.	No. of cases.	Area of land in acres.	Mortgage money.	No. of cases.	Area of land in acres.	Mortgage money.	No. of cases.	Area of land in acres.	Mortgage money.
DISTRICT FIGURES. Total of 6 years—1868-69 to 1873-74 ..	..	..	..	..	..	..	..	..	..
Total of 4 years—1874-75 to 1877-78 ..	417	5,505	1,56,767	96	2,379	51,064	35	163	5,469
1878-79 ..	160	606	42,259	58	200	9,057	14	103	3,411
1879-80 ..	165	1,258	50,442	32	181	5,302	15	1,051	6,150
1880-81 ..	108	946	43,622	21	110	5,568	17	121	5,227
1881-82 ..	186	1,444	78,933	89	335	16,314	64	480	20,883
TAHSIL TOTALS FOR 2 YEARS— 1880-81 TO 1881-82.									
Tahsil Delhi ..	125	1,285	54,802	24	157	7,615	40	318	15,662
,, Sonepat ..	104	553	44,601	78	226	13,159	24	131	5,860
,, Ballabgarh ..	65	552	23,152	8	62	1,108	17	152	4,588

NOTE.—These figures are taken from Tables Nos. XXXV and XXXV B of the Revenue Report. No details for transfers by agriculturists and others, and no figures for redemption are available before 1874-75. The figures for earlier years include *all* sales and mortgages.

Table No. XXXIII, showing SALE of STAMPS and REGISTRATION of DEEDS.

1	2	3	4	5	6	7	8	9	10	11	12	13
	INCOME FROM SALE OF STAMPS.				OPERATIONS OF THE REGISTRATION DEPARTMENT.							
	Receipts in rupees.		*Net income in rupees.*		*No. of deeds registered.*				*Value of property affected, in rupees.*			
YEAR.	Judicial.	Non-judicial.	Judicial.	Non-judicial.	Touching immovable property.	Touching movable property.	Money obligations.	Total of all kinds.	Immovable property.	Movable property.	Money obligations.	Total value of all kinds.
1877-78 ..	1,47,319	33,324	1,45,224	32,388	3,839	451	996	5,286	18,98,941	61,271	4,88,680	24,48,892
1878-79 ..	1,31,232	58,213	1,23,212	55,305	4,303	528	988	5,819	19,52,286	42,695	2,48,401	22,43,382
1879-80 ..	1,09,940	61,712	1,02,153	58,843	3,228	138	549	4,233	16,45,818	58,103	2,66,015	19,99,810
1880-81 ..	1,08,058	61,288	99,395	58,118	3,537	186	494	4,529	19,88,822	53,499	1,33,756	21,83,922
1881-82 ..	1,06,884	71,154	95,321	68,084	3,519	195	432	4,513	26,49,766	1,06,774	1,25,548	28,92,880

NOTE.—These figures are taken from Appendix A of the Stamp and Tables Nos. II and III of the Registration Report.

Table No. XXXIIIA, showing REGISTRATIONS.

1	2	3	4	5	6	7
	Number of Deeds registered.					
	1880-81.			1881-82.		
	Compulsory.	Optional.	Total.	Compulsory.	Optional.	Total.
Registrar Delhi	8	1	9	2	..	2
Sub-Registrar Delhi	1,653	1,155	2,803	1,746	1,180	2,926
" Sonepat	490	671	1,161	511	514	1,025
" Ballabgarh	309	242	551	295	265	560
Total of district ..	2,460	2,069	4,529	2,554	1,959	4,513

NOTE.—These figures are taken from Table No. I of the Registration Report.

Table No. XXXIV, showing LICENSE TAX COLLECTIONS.

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
YEAR.	NUMBER OF LICENSES GRANTED IN EACH CLASS AND GRADE.											Total number of licenses.	Total amount of fees.	Number of villages in which licenses granted.
	Class I.				*Class II.*				*Class III.*					
	1 Rs. 500	2 Rs. 200	3 Rs. 150	4 Rs. 100	1 Rs. 75	2 Rs. 50	3 Rs. 25	4 Rs. 10	1 Rs. 5	2 Rs. 2	3 Re. 1			
1878-79 ..	5	13	8	71	104	263	810	1,778	3,008	4,552	6,593	17,205	1,03,207	..
1879-80 ..	4	14	12	56	77	197	668	1,511	2,440	4,186	5,540	14,705	85,747	..
1880-81 ..	13	10	9	43	58	166	598	1,400	..	..	..	2,297	55,750	224
1881-82 ..	9	14	6	43	49	160	562	1,368	..	..	..	2,211	51,905	225
Tahsil details for 1881-82—														
Tahsil Delhi ..	9	14	5	39	38	104	328	822	..	..	..	1,359	36,420	72
" Ballabgarh ..	..	..	..	1	7	18	34	112	..	..	..	172	3,495	48
" Sonepat ..	..	..	1	3	4	38	200	434	..	..	..	680	11,990	105

Table No. XXXV, showing EXCISE STATISTICS.

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
YEAR.	FERMENTED LIQUORS.					INTOXICATING DRUGS.						EXCISE REVENUE FROM		
	Number of central distilleries.	*No. of retail shops.*		*Consumption in gallons.*		*No. of retail licenses.*		*Consumption in maunds.*				Fermented liquors.	Drugs.	Total.
		Country spirits.	European liquors.	Rum.	Country spirits.	Opium.	Other drugs.	Opium.	Charas.	Bhang.	Other drugs.			
1877-78 ..	3	25	17	936	7,403	45	42	39¼	16	270	½	34,465	33,235	67,700
1878-79 ..	3	25	17	621	5,940	45	42	34¾	14	261	6	26,707	30,315	57,022
1879-80 ..	3	25	16	907	6,447	44	42	45	25	200	6	23,716	26,372	50,088
1880-81 ..	3	25	17	1,547	8,212	44	41	45¾	33	233	6¼	29,619	30,705	60,324
1881-82 ..	3	25	18	1,383	8,153	44	41	41¾	23¾	269	6½	30,186	27,096	57,282
TOTAL ..	15	125	85	5,394	36,155	222	208	206½	111¾	1,233	25¼	144,693	147,723	292,416
Average ..	3	25	17	1,079	7,231	44	42	41½	22⅓	246½	5	28,939	29,545	58,483

NOTE.—These figures are taken from Tables Nos. I, II, VIII, IX, X, of the Excise Report.

Table No. XXXVI, showing DISTRICT FUNDS.

1	2	3	4	5	6	7	8	9	10	11
	Annual income in rupees.			*Annual expenditure in rupees.*						
YEAR.	Provincial rates.	Miscellaneous.	Total income.	Establishment.	District post, and arboriculture.	Education.	Medical.	Miscellaneous.	Public Works.	Total expenditure.
1874-75 ..	..	..	103,820	2,593	*4,164	10,082	868	1,749	59,430	78,381
1875-76 ..	..	..	68,761	2,629	1,890	11,423	1,835	120	52,929	70,826
1876-77 ..	..	..	92,756	2,415	573	12,989	3,899	120	36,328	56,324
1877-78 ..	..	..	56,395	1,935	727	13,287	3,978	206	27,577	47,710
1878-79 ..	..	..	94,392	2,088	1,074	13,960	4,333	176	25,965	47,596
1879-80 ..	82,890	2,594	85,484	2,460	948	14,083	3,946	841	35,126	57,404
1880-81 ..	79,014	1,816	80,830	2,424	1,396	13,413	4,034	560	33,207	55,034
1881-82 ..	80,515	3,961	84,476	2,490	1,458	13,992	4,475	164	33,726	56,305

NOTE.—These figures are taken from Appendices A and B to the Annual Review of District Fund operations.
* District Post excluded.

Table No. XXXVII, showing GOVERNMENT and AIDED SCHOOLS.

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
	HIGH SCHOOLS.						MIDDLE SCHOOLS.						PRIMARY SCHOOLS.							
	ENGLISH.				VERNACULAR.		ENGLISH.				VERNACULAR.		ENGLISH.				VERNACULAR.			
YEAR.	*Government.*		*Aided.*		*Government.*		*Government.*		*Aided.*		*Government.*		*Government.*		*Aided.*		*Government.*		*Aided.*	
	Schools.	Scholars.	Schools.	Scholars.	Schools.	Scholars.	Schools.	Scholars.	Schools.	Scholars.	Schools.	Scholars.	Schools.	Scholars.	Schools.	Scholars.	Schools.	Scholars.	Schools.	Scholars.
	FIGURES FOR BOYS.																			
1877-78 ..	1	77	1	277	..	..	2	399	1	86	7	914	..	..	..	..	39	1,846	40	1,814
1878-79 ..	1	85	1	125	..	..	2	345	1	79	7	961	..	..	..	..	40	1,877	38	1,616
1879-80 ..	1	38	1	9	..	..	3	146	2	84	6	115	8	809	5	568	43	1,865	23	599
1880-81 ..	1	35	1	4	..	..	3	125	2	85	6	152	8	912	5	558	41	1,776	26	670
1881-82 ..	1	64	1	4	..	..	3	107	2	89	6	125	6	988	5	521	43	2,188	26	862
	FIGURES FOR GIRLS.																			
1877-78 ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	37	2	49	13	647
1878-79 ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	37	3	76	17	708
1879-80 ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	54	3	44	13	617
1880-81 ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	56	3	66	13	602
1881-82 ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	57	4	101	8	702

N. B.—Since 1879-80, in the case of both Government and Aided Schools, those scholars only who have completed the Middle School course are shown in the returns as attending High Schools, and those only who have completed the Primary School course are shown as attending Middle Schools. Previous to that year, boys attending the Upper Primary Department were included in the returns of Middle Schools in the case of Institutions under the immediate control of the Education Department, whilst in Institutions under District Officers, boys attending both the Upper and Lower Primary Departments were included in Middle Schools. In the case of Aided Institutions, a High School included the Middle and Primary Departments attached to it; and a Middle School, the Primary Department. Before 1879-80, Branches of Government Schools, if supported on the grant-in-aid system, were classed as Aided Schools; in the returns for 1879-80 and subsequent years they have been shown as Government Schools. Branches of English Schools, whether Government or Aided, that were formerly included amongst Vernacular Schools, are now returned as English Schools. Hence the returns before 1879-80 do not afford the means of making a satisfactory comparison with the statistics of subsequent years.

Indigenous Schools and Jail Schools are not included in these returns.

Table No. XXXVIII, showing the working of DISPENSARIES.

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
		NUMBER OF PATIENTS TREATED.														
Name of Dispensary.	Class of Dispensary.	*Men.*					*Women.*					*Children.*				
		1877.	1878.	1879.	1880.	1881.	1877.	1878.	1879.	1880.	1881.	1877.	1878.	1879.	1880.	188
Delhi ..	C. H.	7,761	10,635	11,213	11,895	13,112	2,258	2,640	3,281	3,851	3,513	2,355	2,898	3,619	3,187	3,
Do. Lal Kua	3rd	1,577	1,788	2,376	3,103	5,162	835	1,345	1,324	763	1,713	1,000	898	770	499	1,
Do. Sadr Bazar ..	3rd	2,272	2,814	3,358	2,568	2,385	1,001	1,467	1,505	1,242	1,098	1,015	2,264	1,890	1,053	1,
Ballabgarh ..	2nd	1,779	2,859	2,788	2,171	2,791	752	743	941	591	795	265	1,027	759	501	
Sonepat ..	2nd	3,928	3,628	3,063	3,605	4,693	848	834	682	830	931	1,085	1,029	847	853	1,
Faridabad ..	2nd	1,676	2,031	2,075	2,041	1,995	484	634	715	493	635	646	779	648	391	
Alipur ..	3rd	646	656	643	804	623	177	226	198	198	185	147	167	116	88	
Mahrauli .	3rd	2,195	2,715	3,010	2,723	2,307	608	745	743	655	701	549	485	369	304	
Najafgarh ..	3rd	..	..	..	410	863	..	..	..	215	316	..	..	..	150	
Total ..	..	21,834	26,626	28,526	29,320	33,931	6,958	8,634	9,389	8,838	9,887	7,062	9,547	9,018	7,026	9,

1	2	18	19	20	21	22	23	24	25	26	27	28	29	30	31	3
Name of Dispensary.	Class of Dispensary.	*Total Patients.*					*In-door Patients.*					*Expenditure in Rupees.*				
		1877.	1878.	1879.	1880.	1881.	1877.	1878.	1879.	1880.	1881.	1877.	1878.	1879.	1880.	18
Delhi ..	C. H.	12,369	16,173	18,113	18,933	20,190	550	870	992	712	849	5,186	10,063	7,530	8,078	6,
Do. Lal Kua	3rd	3,412	4,031	4,470	4,365	8,294	..	..	..	..	..	559	562	575	548	
Do. Sadr Bazar ..	3rd	4,288	6,545	6,753	4,863	4,778	..	..	..	..	..	588	565	587	532	
Ballabgarh ..	2nd	2,796	4,129	4,488	3,263	4,322	63	61	72	102	59	1,741	783	731	744	
Sonepat ..	2nd	5,861	5,491	4,592	5,288	6,664	169	191	130	111	162	2,924	2,926	2,514	1,927	2,
Faridabad ..	2nd	2,806	3,444	3,438	2,925	3,147	..	98	51	68	66	824	611	651	498	
Alipur ..	3rd	970	1,049	957	1,090	914	..	..	..	..	..	651	657	541	554	
Mahrauli ..	3rd	3,352	3,945	4,122	3,682	3,395	..	..	..	..	..	360	553	516	455	
Najafgarh ..	3rd	..	..	..	775	1,436	..	..	..	..	..	..	..	..	249	
Total ..	..	35,854	44,807	46,933	45,184	53,140	782	1,220	1,245	993	1,136	12,883	16,720	13,645	13,685	11

NOTE.—These figures are taken from Tables Nos. II, IV, and V of the Dispensary Report.

Table No. XXXIX, showing CIVIL and REVENUE LITIGATION

1	2	3	4	5	6	7	8	9
	Number of Civil Suits concerning				*Value in rupees of Suits concerning **			
YEAR.	Money or movable property.	Rent and tenancy rights.	Land and revenue, and other matters.	Total.	Land.	Other matters.	Total.	Numb Reve cas
1878	6,500	442	498	7,440	33,045	6,80,729	7,13,774	8
1879	5,495	516	607	6,618	28,602	6,82,971	7,11,573	9
1880	6,312	1,277	395	7,984	57,098	7,28,303	7,85,401	1
1881	6,521	971	489	7,981	56,202	6,50,739	7,06,941	1
1882	5,786	865	705	7,356	38,616	7,52,076	7,90,692	1

NOTE.—These figures are taken from Tables Nos. VI and VII of the Civil Reports for 1878 to 1880, and Nos. II of the Reports on Civil Justice for 1881 and 1882.

* Suits heard in Settlement courts are excluded from these columns, no details of the value of the property available.

Table No. XL, showing CRIMINAL TRIALS.

1		2	3	4	5	6
DETAILS.		1878.	1879.	1880.	1881.	1882.
Persons tried.	Brought to trial	4,920	4,174	4,521	5,229	5,155
	Discharged	1,178	1,299	1,189	1,785	2,021
	Acquitted	1,154	855	1,011	1,021	947
	Convicted	2,599	1,964	2,301	2,383	2,131
	Committed or referred	9	24	6	42	46
Cases disposed of.	Summons cases (regular)	..	..	..	1,795	1,552
	" (summary)	..	..	..	142	167
	Warrant cases (regular)	..	..	..	778	906
	" (summary)	..	..	..	410	315
	Total cases disposed of	3,261	2,544	3,009	8,125	2,940
Number of persons sentenced to	Death	..	4	1	2	2
	Transportation for life	..	3	3	..	2
	" for a term	..	..	3	1	1
	Penal servitude	..	..	..	..	..
	Fine under Rs. 10	1,367	1,103	1,517	1,661	1,375
	" 10 to 50 rupees	216	177	210	216	206
	" 50 to 100 "	15	23	18	34	22
	" 100 to 500 "	5	7	17	8	5
	" 500 to 1,000 "	..	3	1	..	1
	Over 1,000 rupees	..	..	..	..	1
	Imprisonment under 6 months	561	390	323	215	278
	" 6 months to 2 years	196	184	141	120	116
	" over 2 years	48	25	32	19	17
	Whipping	336	211	130	147	106
	Find sureties of the peace	..	..	16	28	..
	Recognisance to keep the peace	30	25	25	26	35
	Give sureties for good behaviour	171	83	96	93	129

NOTE.—These figures are taken from Statements Nos. III and IV of the Criminal Reports for 1878 to 1880, and Nos. IV and V of the Criminal Reports for 1881 and 1882.

Table No. XLI, showing POLICE INQUIRIES.

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Nature of offence.	Number of cases inquired into.					Number of persons arrested or summoned.					Number of persons convicted.				
	1877	1878	1879	1880	1881	1877	1878	1879	1880	1881	1877	1878	1879	1880	1881
Rioting or unlawful assembly	9	4	5	5	8	124	30	28	39	86	82	29	21	38	44
Murder and attempts to murder	8	7	6	8	6	14	9	16	6	13	9	3	7	5	2
Total serious offences against the person	35	36	22	21	23	156	64	55	54	108	103	44	32	48	55
Abduction of married women	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total serious offences against property	386	553	447	382	359	192	308	211	204	170	142	229	151	141	108
Total minor offences against the person	39	33	27	40	25	44	31	40	48	54	27	22	19	29	31
Cattle theft	52	69	44	36	37	32	76	26	27	27	25	61	24	20	19
Total minor offences against property	981	1,322	925	599	493	778	1,057	734	521	441	602	780	551	397	317
Total cognizable offences	1,507	2,036	1,476	1,094	961	1,280	1,580	1,103	891	886	931	1,144	790	647	588
Rioting, unlawful assembly, affray	5	..	3	2	6	24	..	19	17	39	19	..	14	9	35
Offences relating to marriage	1	..	..	..	..	2	..	..	..	..	..	..	..	..	..
Total non-cognizable offences	65	81	55	74	70	124	100	89	114	134	83	76	57	62	103
GRAND TOTAL of offences	1,572	2,117	1,531	1,168	1,031	1,404	1,680	1,192	1,005	1,020	1,014	1,220	847	709	691

NOTE.—These figures are taken from Statement A of the Police Report.

Table No. XLII, showing CONVICTS in GAOL.

1	2	3	4	5	6	7	8	9	10	11	12	13	14
	No. in gaol at beginning of the year.		*No. imprisoned during the year.*		*Religion of convicts.*			*Previous occupation of male convicts.*					
YEAR.	Males.	Females.	Males.	Females.	Musalman.	Hindu.	Buddhist and Jain.	Official.	Professional.	Service.	Agricultural.	Commercial.	Industrial.
1877-78	338	4	785	63	411	525	29	34	..	47	387	..	..
1878-79	461	21	1,102	49	482	735	28	45	..	195	595	..	..
1879-80	300	19	858	45	90	100	2	8	43	16	109	..	..
1880-81	252	16	683	58	132	168	2	12	91	56	92	24	..
1881-82	390	24	493	39	168	234	..	8	25	146	184	21	..

	15	16	17	18	19	20	21	22	23	24	25	26
	Length of sentence of convicts.							*Previously convicted.*			*Pecuniary results.*	
YEAR.	Under 6 months.	6 months to 1 year.	1 year to 2 years.	2 years to 5 years.	5 years to 10 years.	Over 10 years and transportation.	Death.	Once.	Twice.	More than twice.	Cost of maintenance.	Profits of convict labour.
1877-78	363	268	342	150	32	35	..	62	50	36	19,098	..
1878-79	621	414	406	164	22	6	..	49	12	25	22,871	1,873
1879-80	96	112	35	12	1	12	..	50	13	20	19,262	2,930
1880-81	109	175	94	21	11	4	..	37	21	23	19,261	1,333
1881-82	76	29	218	46	22	11	..	36	28	32	20,256	3,074

NOTE.—These figures are taken from Tables Nos. XXVIII, XXIX, XXX, XXXI, and XXXVII of the Administration Report.

Table No. XLIII, showing the POPULATION of TOWNS.

1	2	3	4	5	6	7	8	9	10
Tahsil.	Town.	Total population.	Hindus.	Sikhs.	Jains.	Musalmans.	Other religions.	No. of occupied houses.	Persons per 100 occupied houses.
Delhi ..	Delhi ..	173,393	95,484	856	2,676	72,519	1,858	17,493	991
	Najafgarh ..	3,999	2,117	13	229	1,640	..	489	818
Sonepat ..	Sonepat ..	13,077	5,297	5	1,011	6,764	..	2,097	624
Ballabgarh ..	Faridabad ..	7,427	5,367	5	..	1,988	67	923	805
	Ballabgarh ..	5,821	4,464	..	37	1,320	..	924	630

NOTE.—These figures are taken from Table No. XX of the Census Report of 1881.

Table No. XLIV, showing BIRTHS and DEATHS for TOWNS.

1	2	3	4	5	6	7	8	9	10	11	12	13
TOWN.	Sex.	Total population by the Census of	Total births registered during the year.					Total deaths registered during the year.				
		1875.	1877.	1878.	1879.	1880.	1881.	1877.	1878.	1879.	1880.	1881.
Delhi ..	Males ..	62,040	3,181	2,867	2,164	2,358	3,275	3,056	5,615	4,943	2,450	2,923
	Females	53,952	3,014	2,835	2,073	2,048	3,038	2,959	5,692	4,931	2,321	2,617
,, Suburbs..	Males ..	24,531	1,271	979	610	865	1,402	883	1,553	1,091	632	895
	Females	20,030	1,190	948	485	818	1,272	858	1,372	977	525	763
Sonepat ..	Males ..	7,040	242	244	166	181	282	176	182	320	169	184
	Females	6,597	176	178	144	190	232	136	160	262	133	166

NOTE.—These figures are taken from Table No. LVII of the Administration Report.

Table No. XLV, showing MUNICIPAL INCOME.

1	2	3	4	5	6
NAME OF MUNICIPALITY.	Delhi.	Sonepat.	Ballabgarh.	Faridabad.	Najafgarh.
Class of Municipality ..	I.	III.	III.	III.	III.
1870-71 ..	1,93,272	6,131	3,619	2,217	1,885
1871-72 ..	2,39,330	7,810	3,045	3,146	1,803
1872-73 ..	2,29,629	7,843	3,924	3,694	1,934
1873-74 ..	2,60,257	6,410	3,233	2,640	2,732
1874-75 ..	2,79,973	10,416	3,709	3,672	2,266
1875-76 ..	2,65,775	1,953	2,944	3,090	8,695
1876-77 ..	2,96,070	2,116	3,382	2,915	9,211
1877-78 ..	2,26,862	2,445	3,568	3,460	9,669
1878-79 ..	2,13,631	2,690	4,148	3,661	7,272
1879-80 ..	2,26,633	10,485	3,653	3,347	2,943
1880-81 ..	2,71,968	11,405	4,016	3,790	2,793
1881-82 ..	2,76,560	11,508	3,992	3,861	2,665

Table No. XLVA, showing MANUFACTURES.

1	2	3	4	5	6	7
	Silk.	Cotton.	Wool.	Other Fabrics.	Paper.	Wood.
Number of mills and large factories ..	..	..	..	..	..	..
Number of private looms or small works ..	101	168	5	15	7	71
Number of workmen in large works. { Male ..	..	..	..	..	..	..
{ Female ..	..	..	..	..	..	..
Number of workmen in small works or independent artisans.	310	692	18	42	39	283
Value of plant in large works ..	..	..	..	..	..	..
Estimated annual out-turn of all works in rupees.	1,32,502	1,22,781	3,206	5,494	8,895	1,18,554

	8	9	10	11	12	13
	Iron.	Brass and copper.	Buildings.	Dyeing and manufacturing of dyes.	Leather.	Pottery, common and glazed.
Number of mills and large factories ..	..	..	..	..	..	..
Number of private looms or small works ..	102	118	40	46	268	43
Number of workmen in large works. { Male ..	..	..	..	..	..	..
{ Female ..	..	..	..	..	..	..
Number of workmen in small works or independent artisans.	335	432	169	307	1,584	231
Value of plant in large works ..	..	..	..	..	..	..
Estimated annual out-turn of all works in rupees.	66,068	2,11,060	73,385	42,867	8,07,006	31,706

	14	15	16	17	18	19
	Oil-pressing and refining.	Pashmina and shawls.	Carpets.	Gold, silver, and jewellery.	Other manufactures.	Total.
Number of mills and large factories ..	..	..	..	..	..	..
Number of private looms or small works ..	62	..	14	790	176	2,026
Number of workmen in large works. { Male ..	..	..	..	..	..	..
{ Female ..	..	..	..	..	..	..
Number of workmen in small works or independent artisans.	148	..	59	3,430	850	8,929
Value of plant in large works ..	..	..	..	..	..	..
Estimated annual out-turn of all works in rupees.	1,36,096	..	11,328	53,97,220	2,09,400	73,77,568

NOTE.—These figures are taken from the Report on Internal Trade and Manufactures for 1881-82.

Table No. XLVI, showing DISTANCES.

	Delhi	Alipur	Rai	Sonepat	Larsauli	Kaligarhi	Bhatgaon	Thana Khurd	Juan	Sardhana	Rohat	Ganaur	Jhundpur	Bawana	Narela	Tikri Kalan	Nangloi Jat	Najafgarh	Palam	Basant	Mahrauli	Pali	Dhauj	Badarpur	Faridabad	Ballabgarh	Majhaoli	Chanesa	Fatehpur Biloch
Delhi																													
Alipur	11																												
Rai	21	10																											
Sonepat	28	17	7																										
Larsauli	32	21	11	8																									
Kaligarhi	37	26	16	13	5																								
Bhatgaon	34	25	15	8	13	16																							
Thana Khurd	24	18	11	9	17	22	10																						
Juan	37	26	16	9	11	14	5	15																					
Sardhana	47	36	26	19	12	8	15	25	10																				
Rohat	27	17	9	6	14	19	7	3	12	22																			
Ganaur	35	24	14	10	3	3	14	19	10	8	16																		
Jhundpur	24	13	6	13	16	21	21	16	22	32	15	19																	
Bawana	16	7	12	16	24	29	19	9	24	34	12	26	16																
Narela	17	6	7	11	19	24	19	12	20	30	9	21	11	6															
Tikri Kalan	17	16	23	27	35	40	33	18	33	43	21	37	27	11	17														
Nangloi Jat	11	11	21	26	34	39	30	20	35	45	23	36	24	10	14	6													
Najafgarh	17	18	29	31	38	43	34	24	39	49	27	43	31	16	20	6	7												
Palam	12	21	31	40	44	49	42	32	47	57	35	47	36	20	25	13	12	6											
Basant	10	21	31	38	42	47	44	34	47	57	37	45	34	26	27	17	13	10	4										
Mahrauli	11	22	32	39	43	48	45	35	48	58	38	46	35	27	28	22	18	16	9	5									
Pali	23	34	44	51	55	60	57	47	60	70	50	58	47	39	40	34	30	28	21	17	12								
Dhauj	28	39	49	56	60	65	62	52	65	75	55	63	52	44	45	39	35	33	26	22	17	5							
Badarpur	11	22	32	39	43	48	45	35	48	58	38	46	35	27	28	28	22	23	17	13	7	12	17						
Faridabad	16	27	37	44	48	53	50	40	53	63	43	51	40	32	33	33	27	29	22	18	13	6	11	5					
Ballabgarh	22	33	43	50	54	59	56	46	59	69	59	57	46	38	39	39	33	34	27	23	18	6	8	11	6				
Majhaoli	28	39	49	56	60	65	62	52	65	75	55	53	52	44	45	50	44	45	38	34	29	17	19	17	12	11			
Chanesa	34	45	55	62	66	71	68	58	71	81	61	69	50	50	51	51	45	46	39	35	30	18	19	23	17	12	10		
Fatehpur Biloch	30	41	51	58	62	67	64	54	67	87	37	64	54	46	47	47	41	42	36	34	26	14	14	19	14	8	12	5	
Dhandasa	27	28	39	41	48	53	44	34	49	59	87	53	41	27	30	31	23	10	14	18	22	34	39	30	35	40	51	52	49